Distr.
GENERAL

GC.5/15
20 October 1993

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 11 (b)(ii) of the provisional agenda

INTERNATIONAL ECONOMIC CHANGE AND THE INDUSTRIAL DEVELOPMENT OF DEVELOPING COUNTRIES

Prepared by the Secretariat

CONTENTS

		Paragraphs	Page
EXECUTIVE SUMMARY			1
Introduction		1 - 3	2
Chapter			
I.	TECHNOLOGY AS A KEY COMPETITIVE ASSET	4 - 8	2
II.	THE GLOBAL ECONOMY IN THE SHORT TERM	9 - 21	3
III.	LATIN AMERICA AND THE CARIBBEAN	22 - 38	6
IV.	SUB-SAHARAN AFRICA	39 - 52	9
V.	NORTH AFRICA AND WESTERN ASIA	53 - 67	12
VI.	SOUTH ASIAN SUBCONTINENT	68 - 73	14
VII.	EAST AND SOUTH-EAST ASIA	74 - 79	15
VIII.	CHINA	80 - 87	16
IX.	EASTERN EUROPE AND THE FORMER SOVIET UNION	88 - 98	17
X.	CONCLUSIONS: TECHNOLOGICAL CAPABILITY AND INDUSTRIAL COMPETITIVENESS	99 - 102	18

EXECUTIVE SUMMARY

The present document briefly reviews current changes in the international economic environment, presents short- and long-term economic growth prospects for various regions of the world and examines the impact and role of human capital, technology and institutions on the growth prospects of those regions.

From zero growth in 1991, the world economy grew at just over 1 per cent in 1992, with a similar figure projected for 1993. Manufacturing registered negative growth in 1991 and 1992, with prospects of a slight upturn of 1.3 per cent in 1993. Growth momentum is expected to return by 1994, growth in output projected to increase by 3.1 per cent and global manufacturing by 3.5 per cent. The major factors driving overall change in the global economy are technological change and liberal, market-based economic policies. Technological change has never been greater; advances in computers and electronics in particular are rapidly lowering the costs of communication-information control. Industrialization is a process that is only 200 years old; the prime mover has always been technological innovation. While economic theory long ago incorporated technology as one of the key sources of economic growth, corporate management and Governments have only recently come to recognize that knowledge embodied in technology is a factor of production on a par with capital and labour. Technology and market-based policies have thus forced industrial enterprises in both developed and developing countries to become more efficient by restructuring in terms of production platforms, technology, management, employment, finance and linkages among themselves.

The recovery of growth in the United States has remained sluggish, being little more than 2.1 per cent in 1993. Much of Western Europe faces recession and Eastern Europe is confronted with difficult problems of political and economic transition. Even Japan, which had seemed invulnerable to economic recession, is undergoing a rapid economic deceleration despite its Government's pump-priming efforts. The uncertainty surrounding the growth patterns of the major industrialized countries has a direct bearing on the growth prospects of developing countries. However, UNIDO is convinced that the growth rate for developing countries as a group (excluding China) should improve by half a percentage point in 1993 to 4.0 per cent and by about the same amount in 1994

V.93 89193 6250E

Distr.: 28 October 1993

to bring the rate up to 4.4 per cent. Manufacturing value added (MVA) growth rates should be even better, reaching 4.9 per cent and 6.0 per cent in 1993 and 1994, respectively. Moreover, UNIDO's five-year projection places the growth rate for developing countries (excluding China) at an average of 4.4 per cent per year, with China expected to grow at an average 8.0 per cent per year for the next five years.

Economic transition is not unique to the countries of Eastern Europe and the former Soviet Union. Many countries of the developing world face the problem of economic transition as they move from inward-looking to outward-looking strategies. Having taken the first macroeconomic steps in liberalizing trade and implementing monetary stability, those countries now require institutional and micro-economic reform to foster the creation and growth of the enabling environment so essential to industrial development. The issues of debt, capital flows, macroeconomic policy and trade liberalization that dominated the attention of policy makers in the 1980s all still remain crucially important in some countries such as those in sub-Saharan Africa. However, questions of technology, industrialization and productivity now clamour for attention with the increasing recognition that the accumulation of technological capabilities within productive enterprises remains central in attempts to expand output, improve export performance and raise standards of living. Linkages between research and technology, technological education and industrial production have to be strong and well articulated; they depend on well functioning institutional and organizational arrangements. Lack of investment in physical and human capital or investment misallocation in both areas are the most significant barriers to improved living standards.

After the political events in Eastern Europe and the economic reforms in many developing countries, the free market model has been seemingly restored to the central position in economics from which Lord Keynes had dislodged it only temporarily. The "magic of the market" is now presumed to cure all problems in both developed and developing countries, thereby dismissing the validity of the theory of economic development. The crucial difference between developing and developed countries, however, lies in the extent of the development of their markets. Policy prescriptions must distinguish between industrialized economies with highly developed goods and capital markets and developing economies with poorly developed or - especially at present - collapsed markets. The problem for Governments and the international community is to decide between the fine balance between too much and too little intervention, between too much and too little protection, and between too much and too little privatization.

Introduction

1. The purpose of the present document is to briefly review current changes in the international economic environment and to indicate the impact those changes have on the industrial development of developing countries. In analysing those impacts, short-term growth rates for the economy and the industrial sector are presented for developing regions and subregions, as well as for the countries of Eastern Europe and the former Soviet Union. The longer-term prospects of these areas are examined in outline, and an indication is given of some of the challenges that have to be met and some of the opportunities that have to be seized. Emphasis is placed on the need to enhance the development of human resources, and the institutions through which human capacities determine the success of countries' industrial development efforts.

2. It should be recalled that physical capital stock is only part of the explanation of the difference in output per worker in developed and developing countries. A larger stock of physical capital leads to improved productivity and higher output and income. However, it is human skills and human enterprise, as well as the institutions - organized and operated by men and women - which make the crucial difference in determining the speed and direction of industrial and economic development. Such development depends vitally on the creation of a labour force equipped both with the necessary technological skills for modern industrial production and with a motivation or philosophy that facilitates the acceptance and promotion of economic and technical change. There is an essential complementarity between capital equipment and technology and a skilled and motivated labour force.

3. Following a brief note on technology the document reviews current changes in the international economic environment. The paper then goes on to examine the impacts of those changes in Latin America and the Caribbean; sub-Saharan Africa; North Africa and Western Asia; the South Asian subcontinent; East and South-East Asia; China; Eastern Europe and the former Soviet Union. Certain commonalities in economic background as well as the availability of data has determined the use of these subregional and regional aggregates rather than the more conventional United Nations categories of regions. The longer-term industrial and economic prospects of each region or subregion is examined in outline, with some slight emphasis being given to technological and human resource capability. The industrial outlook of the three most developed regions - North America, Japan and Western Europe - is provided in the summary of the Global Report (GC.5/20, chap. II). The document ends with a brief conclusion on technological capability and industrial competitiveness.

I. TECHNOLOGY AS A KEY COMPETITIVE ASSET

4. Industrialization is a process only 200 years old; the prime mover has always been the progress of technological innovation. In the last decade of the twentieth century technology is ever more a key asset for firms' competitiveness and countries' economic growth for a number of reasons which have come more sharply into focus.

5. First, production is increasingly knowledge-intensive, as a combined result of the emergence and expansion of information- and knowledge-based industries and the diffusion of new process technologies. On the one side, there is a structural shift in the major industrial countries to industries which are innovation- and skill-intensive, such as electronics, electrical, non-electrical and transport equipment as well as to service industries. On the other, new information-based technologies have not only affected high-tech sectors but also find significant applications that enhance productivity

and quality in many industries where technologies are mature and well diffused.

6. Secondly, the accumulation of innovation-based advantages is a prerequisite for international competitiveness. The firm's technological capabilities and the characteristics of the national system of innovation in which it operates have a major impact on relative and absolute trade advantages. The pattern of trade in relatively high technology-intensive industries is primarily affected by countries' advantages in product innovation. The ability to raise efficiency through new process technologies (including flexible automation) and organizational changes is, in turn, critical for international competitiveness in low and medium technology-intensive industries. Technology is, in short, an important explanatory factor in international trade.

7. Thirdly, while economic theory long ago incorporated technology as one of the key sources of economic growth, 1/ the perception that knowledge embodied in technology is a factor of production like capital and labour now has become widely recognized by corporate management and government. Thus, past investments and accumulated knowledge open the possibility of a virtuous cycle in which investment spurs knowledge and knowledge spurs investment. Lack of investment in physical and human capital, and investment misallocation in both areas are the most significant barriers for the developing countries catching up with the industrialized countries.

8. In sum, technology is a critical asset for production, competitiveness and long-term growth. Greater and explicit efforts are made by firms and Governments, particularly in the rich developed countries, to build up and preserve technological advantages. Those efforts reflect themselves in intangible investments and in science and technology, as well as in the attitudes of firms and Governments towards technology transfer and diffusion.

II. THE GLOBAL ECONOMY IN THE SHORT TERM

9. From zero growth in 1991, the world grew at barely more than 1 per cent in 1992, and 1993 promises to be the same. World manufacturing suffered more, registering negative growth in 1991 and 1992 and the outlook for 1993 is hardly better at 1.3 per cent. The growth momentum is expected to return by 1994, with an output growth of 3.1 per cent projected and with manufacturing moving strongly to positive growth territory, at about 3.5 per cent per annum. Several general factors are driving overall change in the global industrial economy. First, is that technological change has, perhaps, never been greater than at present; advances in computers and electronics in particular are rapidly lowering costs of communication - information - control. Secondly, liberal, market-based economic policies have spread to all corners of the globe. Industrial enterprises in both developed and developing countries are being forced to restructure in terms of production platforms, technology, management, employment, finance and linkages among themselves, merely to remain competitive.

10. Thirdly, output behaviour in the advanced countries has confounded conventional norms. By past standards the United States should have recovered in 1992 with a growth rate much above the 2.1 per cent increase recorded, and 1993 promises to be not much better. Short-term regional differences seem as great as the common factors. Present performance of both Western Europe and Eastern Europe - including the new countries that replaced the former Soviet Union - is disappointing. In the latter region, introduction of market-based economic structures has proved much more difficult than had originally been hoped for, and industrial decline continues in 1993 for all but a few Eastern European countries. In Western Europe, prospects have been sharply downgraded since about the third quarter of 1992. The expected positive impact of the introduction of the single market for the European Community (EC) in 1993 seems hardly noticed, and the Exchange Rate Mechanism has collapsed. Indeed, the first year of the European Community's single market, 1993, has seen the continent's worst recession for two decades. Germany is now in deep recession, with manufacturing output slated to fall by 6 per cent by the year's end, and France, Italy, Netherlands, Spain and Sweden are all in recession. Output gains expected in other Western European countries this year will be effectively cancelled in the regional aggregate by these recessions. Even Japan, which seemed invulnerable to economic recession, is undergoing a rapid economic deceleration despite its Government's pump-priming efforts.

A. Growth prospects of developing countries

11. The uncertainty surrounding the growth patterns of the major industrialized countries has a direct bearing on the growth prospects of developing countries. UNIDO is convinced however that the growth rate for developing countries as a group (excluding China) should improve by half a percentage point in 1993 to 4.0 per cent and by about the same amount in 1994 to bring the growth rate up to 4.4 per cent. Manufacturing value added (MVA) growth rates should be even better, and should reach 4.9 per cent and 6.0 per cent in 1993 and 1994 respectively. Nevertheless, in 1994, the prolonged recession in rich countries would negatively affect most Caribbean countries and some Latin American countries, including Argentina, Suriname and Venezuela; Chad, Côte d'Ivoire, Ghana, Madagascar, Mozambique, Nigeria, Sierra Leone and Zambia in Africa; Saudi Arabia and other oil exporters in the Middle East; and Indonesia, Malaysia, Papua New Guinea and other commodity exporters in South-East Asia. At the same time, developing countries have learned to insulate their economies more effectively from adverse external economic forces, and to rely more on their internal resources and domestic or intraregional markets. 2/ What concerns

---

1/ E.F. Denison, The sources of economic growth in the United States and the alternatives before us, Committee for Economic Development, Washington, D.C., 1962 and R. Solow, "Technical change and the aggregate production function", Review of Economics and Statistics, August 1957.

2/ Industry and Development: Global Reports 1986 (UNIDO publication, Sales No: E.86.II.B.5), 1987 (UNIDO publication, Sales No: E.87.II.B.2), 1988/89 (UNIDO publication, Sales No: E.88.III.E.6).

developing countries most nowadays is the macro-economic environment under which the global economy functions. It is the qualitative changes in the global financial and trading regimes, i.e. changes in interest and exchange rates and protection, that affect developing countries the most. To a large extent, those changes are brought about by policies of major industrialized countries. One of the changes that could help the world economy in the 1990s is a potentially strong United States of America economic leadership with its principal focus on economic growth. To be sure, the immediate objective of United States policy makers is the domestic economy, and in particular job creation. While the effort to revitalize the United States economy is accompanied with new policy initiatives on international economic dealings and trade arrangements, it would also eliminate some basic global economic imbalances. Long-term United States interest rates have fallen by about 2 percentage points and short-term rates over which the Government exercises considerable control have been reduced by about 5 percentage points since mid-1990 to their lowest level in 30 years. Lower interest rates are expected to save United States business some $30 billion, home-owners some $22 billion and Government some $30 billion a year. Moreover, the United States Government hopes to reduce its fiscal deficit, which had become a burden to the world as well as to the United States. If successful, the deficit reduction would tend to keep interest rates down, domestically and internationally, and encourage investment which is essential for growth.

12. The benefit of a lower interest rate to indebted developing countries is obvious. The aggregate external debt of developing countries, in various stages of debt restructuring, is estimated to still exceed $1.2 trillion, of which the interest-rate-sensitive portion amounted to $698 billion in June 1992. A one hundred bases points (i.e. 1 percentage point) reduction in interest rates saves these countries about $7 billion a year in hard currencies. That these are significant sums to developing countries can be seen from the fact that the net transfer of financial resources to developing countries amounted to $28 billion in 1991 and $25 billion in 1992. Of the $134 billion in aggregate financial inflows to developing countries that took place in 1992, more than half originated from the private sector, with this growth especially from the non-bank private sector reflecting a reassessment by these investors of the performance and prospects of developing countries. The multilateral financial institutions usually credit this change of perception to the painful reforms undertaken by developing countries, especially their financial and trade liberalization measures. Two examples are sufficient to illustrate this change of perception. During the 1980s, the idea of United States institutional investors voluntarily purchasing peso-denominated Mexican Treasury bills would have been highly unlikely. Since 1991, foreign investors reportedly have purchased $9 billion in Mexican Treasury bills (which currently yield 17 per cent), and some $20 billion in Mexican bank certificates of deposit (which yield 22 per cent). The main deterrent to such purchases, the currency risk associated with these investments, proved to be minimal, i.e. less than 5 per cent peso devaluation a year so far. This can be compared with the 20 to 30 per cent one-time devaluations involving some of the key European currencies during the same period. The other example can be found in a comparison of the performance of so-called "emerging stock markets" of some developing countries with the major markets of London, New York and Tokyo. Foreign equity investment in these emerging markets increased from $0.4 billion in 1989 to over $6.0 billion in 1991, and to an estimated amount of $5.2 billion in 1992. Total private portfolio investment flows, including international bond financing, to developing countries have jumped from $7.6 billion in 1989 to $20.3 billion in 1991, and are estimated to have reached over $27 billion in 1992.

B. The industrial competitiveness of developing countries

13. The idea that poorer countries with low wage labour should catch up on richer ones through trade is as old as the theory of international trade itself. That convergence in income has somehow failed to take place between developed and developing countries - and has happened mainly among developed countries up to now - is usually taken as an indictment against the existing system of global trade.

14. An analysis of the wage levels in the manufacturing sector observed in 1990 in some 110 countries, converted into dollars at current exchange rates, shows that German manufacturing workers were paid the highest and the workers in the United Republic of Tanzania the lowest wages in terms of annual remuneration. There was an enormous difference in productivity between the workers in those two countries - the gross output of German workers being 48 times greater than that of their Tanzanian counterparts. The wage differential between the two countries was, however, 189 times in favour of German workers, making the African country a much cheaper place to locate in terms of labour cost per unit of output. Even so, the labour cost advantage enjoyed by Tanzanian manufacturers was more than ruled out because of a much higher cost of industrial materials that they had to bear. The actual breakdown of production costs in 1990 involving these two extreme case countries were: per $100 worth of manufacturing output, direct labour costs of $6.30 in the United Republic of Tanzania and $24.98 in Germany, and respective material costs of $78.10 and $50.40, leaving respectively $15.60 and $24.62 as gross manufacturing profits in each country. This example illustrates one of the basic problems encountered by developing countries in general. Although low wages in developing countries hold down their unit cost of labour, high cost of intermediate inputs to manufacturers in those countries often nullifies this basic production cost advantage. The overall cost of intermediate inputs is higher in developing countries because they invariably include imports, especially for those engaged in manufacturing, in the form of processed or semi-processed industrial raw materials, and parts and components for finished products. The prices of imported intermediate goods, supplied frequently by developed countries, become higher in developing countries partly because they have to go through the arduous process of international trading, involving specialized trading agents and commission brokers. And the margins charged by various international trading agents often become exorbitant compared with the original prices of products and materials involved. It does seem that developing countries would be well advised

to devote more attention to choice of suppliers, whether of processed raw materials, intermediate inputs and components, or bought-in management and other business services, and to negotiate with such suppliers in the knowledge that there are usually alternative competitive suppliers available in the international market.

15. In traditional theory, production costs determine the price of a product. In reality, however, costs of production determine only a part of the final price, and that part has been shrinking to the extent that it is now becoming completely overshadowed by distributional and marketing costs. Again, in theory the price of an internationally-traded product deviates from its original factory-gate price by customs duties and international transportation costs. That costs of those two factors combined occupy a very insignificant portion of the final imported price to destination owes much to the continuous rounds of tariff reduction in developed and developing countries in recent years and the competitive price structure maintained by the global freight-carrying industry. However, famous brand name running shoes selling at a retail price of $82 in New York, cost no more than $6.50 at the factory gate of its original producer in the Republic of Korea. Similarly, a particular brand of men's shirts retailed in Germany at $42 would have cost the German importer- distributor between $1.25 to $1.85 depending on the identity of its contract producer, located respectively in Sri Lanka, Poland or the former Yugoslavia. Indeed, a random survey by UNIDO involving typical original, brand name product-processing establishments located in three specific export-processing zones scattered through Sri Lanka to China, disclosed that the ratio between the actual factory-gate price and the retail price at destination is roughly 1:12. This high ratio is not meant to imply greed on the part of distributors. Not only do transport and storage costs have to be met, as well as wholesale and retail mark-ups, but major companies engage in very extensive advertising campaigns such as the sponsoring of international sporting events as part of their marketing efforts. What the high price ratio emphasizes is that in 1993 international competition prevails at two distinct levels - production and distribution. For a range of labour-intensive products such as textiles, garments and consumer electronics, there is competition in low value-added production among developing countries. For those same products, there is also competition in high value-added distribution among international brand suppliers.

16. It should be emphasized that the impact of industrialization on developing countries has varied considerably in terms of both overall economic growth and levels of industrial and technological development and capabilities. Some countries have registered a remarkable industrial performance and are moving rapidly towards technologically sophisticated industrial structures based on globally-oriented strategies. Most developing countries have lagged behind considerably, particularly with respect to technological developments and development of competitive skills and capability. Some countries, including the least developed countries, have managed to establish only rudimentary and vulnerable industrial structures and continue to be far behind in terms of economic growth; every year their number increases.

C. Trade and economic policy

17. The direction of United States economic policy is clear. Not only will energetic attempts be made to reduce its fiscal deficit and to keep interest rates down, but the United States will continue to urge Western Europe to also lower interest rates for their own economic recoveries, and to open markets to the Eastern European countries in transition. At United States' prompting, Japan has pledged to reflate its economy with a very considerable fiscal and monetary stimulus to, inter alia, encourage imports and discourage exports. And the United States took the lead role in promoting the multibillion dollar international financial package to help the Russian Federation. All that is required for a global economic recovery, apparently, is a strong and convincing United States economic recovery. However, missing from this picture is the role of developing countries despite their almost fixed place in the traditional debate on a new international economic order. It is almost as though developing countries have become politically irrelevant with the passing of the cold war. In economic terms, this implies that the hitherto largely unutilized and underutilized resources of developing countries will remain superfluous in a global economy characterized by excess production and under- consumption, causing slow growth and unemployment in developed countries. For the foreseeable future, "cheap imports", i.e. effective import competition, will be resisted for the most part by the developed world, whether these imports originate in developed or developing countries.

18. Yet, paradoxically, the economic prospects for developing countries as a group are much better during the 1990s than in the previous decade. UNIDO's five-year projection places the growth rate for developing countries, excluding China, at an average of 4.4 per cent per year, with China expected to grow at an average 8 per cent a year for the next five years. The longer-term World Bank projections bear out this general optimism with an average rate of 4.7 per cent a year over the coming decade for developing countries. As the industrialized countries, one after another, have succumbed to economic recession over the past three years, the developing countries as a group have remained largely unaffected with a steady 3.2 per cent growth maintained over this period. This achievement is all the more impressive placed against the growth rates of the countries of the European Community. Foreign investors have responded to this comparison through the unprecedented increase in private non-bank investment flows to many developing countries. This sudden transformation in investor perception reflects the painful but successful economic reforms in many developing countries: liberalization of trade and finance, control of government spending, the sale of inefficient state enterprises and the relaxation of state control over industry and commerce. Equally, the "push" effect of low United States interest rates has helped a great deal. The success of the new administration in lowering long-term interest rates provides a genuine opportunity for growth in the United States and in the rest of the world. The most significant change for many developing countries in recent years was their willingness to open their economies, and to embrace the logic of free markets. It is ironic, therefore, to find that the rich world has decided, in the meantime, to reverse direction - to move towards managed

trade. There is every likelihood that under the new United States administration, free trade would undergo careful scrutiny as a functioning system not only in facilitating the exchange of goods and services among countries, but also in balancing conflicting national economic interests of trade partners, and partners to the partners. Therefore the immediate hope for developed and developing countries is a strong United States economic recovery that would reduce the immediate trade pressures on the United States administration even as that recovery provides a stimulus to world growth. Such a recovery would give the United States and the rest of the world time to resolve problems associated with trade gradually and rationally.

D. Trade and regional integration

19. The trend towards regional integration not only adds a new dimension to the existing framework of international cooperation, but is also expected to cause a large redistribution of industrial activities within the region itself, as illustrated by the major (and painful) industrial restructuring which is occurring in the European Community. The argument for regional integration based on economies of scale in production has, however, become increasingly unconvincing, since it is unlikely that any region would contemplate forcing the current massive industrial restructuring for the sake of a 3 to 5 per cent gain in the combined gross domestic product (GDP) of member countries over several years. Indeed, regional cooperation should be seen in its real defensive context. Discussion of regional trade pacts often reflects the desire on the part of the participating countries to alleviate through barter trade or a regional payments union the balance-of-payments problems that have come to plague most countries of the world. In such circumstances, a successful conclusion of current General Agreement on Tariffs and Trade (GATT) negotiations may not by itself bring a halt to the trend towards bilateralism and regionalism until a more rational international payments system is instituted.

20. The continuous failure so far to reach a new GATT agreement basically reflects the uneasy reaction towards forcible restructuring in a slow-moving world economy. The orthodox proposition that countries benefit from trade through international specialization becomes meaningless when the prospect of full employment does not exist, and becomes invalid when world trade is conducted on the basis of absolute rather than comparative advantage, without ever reaching a world-wide equilibrium in trade and payments balances. Understandably, therefore, there is now a sharp disjuncture between theory and practice in the trade policies of advanced countries. In the meantime, most developing countries have been converted into enthusiastic free traders and practitioners of doctrinaire economic liberalism. The change of ideological persuasion in the countries of Eastern Europe also commits them to joining the ranks of the free traders. It should be noted that both groups of countries are underdeveloped - meaning that they have more legitimate reasons for seeking protection for their domestic industries from foreign competition.

21. As long as it is not purely defensive, the trend towards regional and subregional cooperation involving not only the exchange of goods but a free movement of factors of production across national borders represents one of the most exciting experiments injecting a new source of dynamism into an otherwise stagnant world economy which is preoccupied with "national" productivity gains. Productivity world-wide will improve if countries pool their resources and combine their separate national markets to exploit economies of scale in production. Essentially, such an experiment in different forms and on a much-reduced scale is proceeding along the border between the United States and Mexico, along the eastern and southern coastlines of China, Hong Kong and Taiwan Province, and between Singapore, Malaysia and adjacent Indonesian islands.

III. LATIN AMERICA AND THE CARIBBEAN

A. Short-run outlook

22. Signs are increasing that the decade-long setbacks in investment and industrial output have ended in Latin America and the Caribbean. Thanks to achievements in containing hyper-inflation and the debt burden in many countries, foreign direct investment (FDI) has begun to flow in at a faster pace. FDI, which was a major source of technology transfer in earlier years, slowed down considerably in the 1980s. The privatization movement is opening up opportunities for investment, restructuring and new competition, promising to raise the stagnant level of productivity and efficiency. Debt-equity swap activities have progressed in tandem with privatization. Furthermore, regional and subregional movements for integration have returned, auguring well for an upsurge of trade and investment within the region.

23. The upswing in the region that began with an increase in GDP growth from 0.5 per cent in 1990 to 2.9 per cent in 1991 lost a little of its momentum in 1992 when growth fell to 2.3 per cent. The rate of growth in GDP in Latin America and the Caribbean in 1993 is expected to be 3.1 per cent and rise slightly to 3.5 per cent in 1994. Regional MVA is expected to grow by 2.8 per cent and 3.8 per cent in 1993 and 1994, respectively. The forecast for 1993 GDP and MVA growth rates, if achieved, would be higher than in any year since 1986, when GDP growth was 3.4 per cent and MVA growth was 5.0 per cent.

24. The most encouraging feature of the recovery process is the huge drop in inflation in many countries of the region. Based on the International Monetary Fund's (IMF) mid-year inflation estimates for 1993, Argentina will have reduced inflation from 171.7 per cent in 1990 to 9.3 per cent in 1993, Chile from 21.8 to 11.9, and Mexico from 22.7 to 8.0 per cent. Venezuela and Colombia were less successful, but have held inflation in the 30 per cent range since 1990. In Brazil inflation was brought down from nearly 3,000 per cent in 1990 to 413 per cent in 1991, but then increased to just over 1,000 per cent in 1992, and the mid-year forecast for 1993 from the IMF is for it to continue at about the same rate.

25. One downward risk in the UNIDO forecast might be the 3.0 per cent GDP growth forecast for Brazil in 1994. With continuing high inflation an important question is how much it will cost Brazil in terms of economic growth in order to stabilize the price level. However the outlook is positive since the new Government has announced the main outlines of a fresh start, with an emphasis on fiscal austerity and monetary stabilization.

Other countries have eliminated all subsidies, reduced trade barriers, deregulated markets for greater competition, and privatized (or promised to privatize) state enterprises, in addition to strict monetary stabilization. In short, a favourable business environment seems to have returned to the region.

26. While primary products are still an important export item, the main impetus for export growth is in the manufacturing sector. Despite the vast expansion in world trade in manufactures during the 1980s the region slightly increased its share of the world total from 1.5 to 1.7 per cent during the period. In the high technology sectors, where research and development costs tend to be a larger share of total production costs, the region also increased its share of the world market between 1980 and 1989. Thus in the high technology sectors of chemicals, medicinal and pharmaceutical products, plastic materials, non-electrical and electrical machinery, transport equipment, and professional, scientific and controlling instruments, have increased the share of world exports in five of these seven sectors. These are also the sectors that have shown the most rapid export growth in the region over the last 20 years. Thus in Brazil and Mexico, which account for 90 per cent of the region's total, high technology exports have been growing at an average annual rate of over 20 per cent since 1970. In 1989 high technology exports accounted for over half of total manufacturing exports in both countries (54 per cent in Brazil and 60 per cent in Mexico). 3/

27. Since world economic growth will remain sluggish in 1993, new export markets will be more difficult to penetrate and commodity prices could remain soft. However, the resumption of growth in the region continues to encourage increased purchases of imported capital goods by domestic entrepreneurs to improve the competitiveness of their plants. These purchases will establish a sounder basis for future growth, but at the cost of a temporary deterioration of trade balances. Flows of private capital into five Latin American countries (Argentina, Brazil, Chile, Mexico and Venezuela), tripled in 1991 to more than $40 billion, eight times the 1989 level. The inflows, including a substantial repatriation of flight capital, equities, country funds and foreign direct investment placed abroad by residents, were sufficient to generate nearly three times the funds needed to finance the deficits on the countries' trade in goods and services, and helped to boost foreign exchange reserves by $15 billion. 4/

28. According to the Inter-American Investment Corporation (IIC), during 1992, over $10 billion was raised in the transfer of ownership of state enterprises to the private sector. This sum accounts for one quarter of total sales of state-owned firms worldwide and is second only to the transaction volume of privatization in Eastern Europe. Argentina, Bolivia, Brazil, Peru, Venezuela and the Caribbean countries are expected to accelerate their efforts in this area. Chile and Mexico have virtually completed the process. Privatization has invigorated a broad spectrum of private investment as the new owners strive to install new technologies and streamline production.

B. Long-run prospects

29. Reflecting these favourable developments, the Inter-American Development Bank has projected an optimistic scenario to the year 2000. Noteworthy is the return of flight capital back to the region. It is expected to provide a powerful push reaching $10.2 billion by the year 2000 from the $2.6 billion available in 1992. Foreign direct investment will jump to $22 billion in 2000 from $9.3 billion in 1992. Exports of goods should more than double from $131 billion in 1992 to $268 billion in the year 2000. 5/

30. This optimistic scenario depends upon a successful response by domestic industry to the challenge of abrupt exposure to domestic, regional and international competition within the context of the new macroeconomic environment in Latin America and the Caribbean. Trade liberalization and greater stability in the monetary regime should lead to a new focus on the micro-economic environment and how this environment can become more supportive of industry. Domestic producers facing competition must be allowed to react flexibly by policy changes which encourage factor mobility and stimulate structural change. Trade deregulation and privatization must be accompanied by the establishment of a regulatory framework which stimulates economic efficiency and distributive justice in the provision of goods and services for markets often characterized by imperfection if not failure.

31. Two extremes have traditionally characterized the interface between Government and the private sector in the region: distance - if not antagonism - on the one hand and capture on the other. There is a major need for this interface to be transformed into a relationship of trust, based on a shared vision of a country's future, common interests and objectives, around which all parties can negotiate broad objectives, specific targets, and mutual responsibilities in attaining those targets. For example, many Latin American and Caribbean countries have invested heavily in their technology infrastructure over the past two or three decades. However, the linkages of these institutions, such as universities, government research and development laboratories, metrology and other test centres - with the production sector, have often been tenuous. The historically weak economic incentives for both parties - namely enterprises to upgrade their technology and innovative with new skills and capabilities, and science and technology institutions to deliver useful knowledge and advice - have been a basic cause of their relative isolation.

32. Creative cooperation between science and technology institutions and industrial firms can be based on a number of supports, including the development of cooperation in generic technologies still at the pre-competitive stage; the setting up of productivity and demonstration centres focusing

---

3/ "Latin America's Exports of Manufactured Goods, Part 2", Economic and Social Progress in Latin America, 1992 Report, Inter-American Development Bank, Washington, D.C., 1992, pp. 251-253.

4/ Annual Report 1992, Inter-American Investment Corporation, Washington, D.C., 1993.

5/ Ibid.

on clearing technological bottlenecks and facilitating domestic technology transfers; the establishment of feed-back mechanisms between firms and science and technology institutions, and among those institutions; the gearing of such mechanisms systematically to capability and skill accumulation in specific areas; and the establishment of highly focused criteria which facilitate the identification of those activities requiring promotional effort and other activities which can be pursued through market mechanisms.

33. While there has been wide recognition of the problems of transition to be overcome by the countries of Central and Eastern Europe and the former Soviet Union, almost as urgent are the similar problems of transition facing the countries of Latin America and the Caribbean as these countries move from inward-looking to outward-looking strategies. Having taken the first macroeconomic steps in liberalizing trade and implementing monetary stability these countries now require institutional and micro-economic reform to foster the creation and growth of the enabling environment so essential for industrial development.

34. The relatively low wages in comparison with the North American level as shown in table 1 below, reflect essentially technological differences which, in turn, can be roughly captured by measuring labour productivity as a percentage of the North American level. On average, labour productivity in the region is shown to be roughly 30 per cent of the North American level. The remaining 70 per cent represents a "technology gap" between the two regions. That gap compares with a gap of over 80 per cent for the East and South-East Asian region, i.e. labour productivity in Latin America and the Caribbean is 10 percentage points ahead of East and South-East Asia relative to the North American standard as of 1990. It should be borne in mind that the relatively high level of labour productivity (compared with the Asian and African regions) has been achieved with the active participation of foreign direct investment in the manufacturing sector of the region. For instance, in the Brazilian manufacturing sector, foreign-owned firms account on average for 28.5 per cent share of total sales, compared with 59 per cent for private domestic manufacturers and 12.5 per cent for state-owned manufacturers.

35. More-diversified export products and supply sources are beginning to emerge throughout the region in chemicals and in basic and other manufactures. Yet considerable scope exists for production of a wider variety of exports of basic and other manufactures. Promising areas include plumbing, heating and lighting equipment from Chile and Venezuela; essential oils and perfume materials from Chile and Uruguay; and plastic materials from Colombia and Venezuela. In chemicals and fertilizers, rapid export expansion in such countries as the Bahamas, Panama, Uruguay, and Venezuela is capturing an ever-increasing proportion of the region's exports.

36. The systematic changes in the region's export composition are related to both the stage of industrialization and the level of economic development of the individual countries. Broadly speaking, those countries that are at a somewhat early stage of industrialization and that are exporting primarily textiles, clothing, footwear and leather are expected to gradually move into newer export industries such as electrical machinery, telecommunications equipment, and non-electrical machinery as economic development progresses and new technologies are absorbed. High-technology goods such as automobiles, computers and biotechnology products are becoming increasingly important to other countries besides Brazil and Mexico, the two leading exporters of these items in the region. Already Trinidad and Tobago and Uruguay are achieving high growth rates, and new industries are being developed in Argentina through joint ventures with firms in the United States, Europe and Japan. As exports of goods spread throughout the region, the focus is likely to be in chemicals, medicinal and pharmaceutical products, and plastic materials. Joint ventures with foreign companies are proving to be a successful way of transferring technology to the region. 6/

37. The training of research scientists and engineers is critical in the development of high-technology industries. So far, in Latin America and the Caribbean the average ratio of research scientists and engineers to total population is only about one-tenth of that in the industrialized countries and roughly one fourth of that in the Asian newly industrialized countries. Even countries such as Argentina, Brazil, Chile, and Uruguay fall considerably short of the amounts needed to draw high-tech industries. The development of domestic science and technology would permit countries in the region to obtain greater technical knowledge through foreign direct investment in high-technology goods. Additional investment in human capital would provide an important stimulus to the expansion of the high-technology sector. Overall, the region has experienced marked improvements in recent years, although major deficits persist. The development and upgrading of human capital in the coming years would undoubtedly produce dynamic changes in comparative advantage. The Latin America and the Caribbean region needs to identify the types of investments necessary to improve human resource capabilities.

38. Despite the reform efforts in virtually every country in the region, the challenges are daunting. In the long run, gains in labour productivity and efficiency-based growth depend crucially on, inter alia, technical progress and institutional structures that provide ample incentives, and the information on technological risk-taking. During the 1980s policy attention shifted away from questions of technology, industrialization and productivity towards issues of debt, capital flows, macroeconomic policy and trade liberalization. Moreover, periods of macroeconomic instability increased the benefits of short-run, rent-seeking behaviour, and reduced the pay-offs of the necessarily long-term process of accumulating technological capabilities. Nevertheless the accumulation of technological capabilities within productive enterprises remains central to economies of the region in their attempts to expand output, improve export performance and raise standards of living.

6/ Economic and Social Progress in Latin America, 1992 Report, op. cit.

Table 1

Labour productivity and wage earnings per worker in Latin America and the Caribbean as a percentage of the North American level, 1970, 1980 and 1990
(In constant 1985 dollars)

Industry	Labour productivity			Wage per worker		
	1970	1980	1990	1970	1980	1990
Food products	21.18	20.52	19.23	15.74	15.04	13.82
Beverages	29.65	30.12	20.02	21.98	17.93	13.08
Tobacco products	45.16	35.61	15.83	18.93	15.78	13.48
Textiles	37.67	44.71	34.92	22.64	20.52	16.60
Wearing apparel	34.15	38.71	31.14	22.18	20.04	17.61
Leather and fur products	37.37	30.52	34.67	20.60	21.60	19.92
Footwear (excluding rubber or plastic footwear)	32.66	27.10	25.92	25.30	23.33	17.59
Wood and cork products	27.96	24.84	15.77	13.06	11.93	8.47
Furniture and fixtures	23.52	28.57	17.62	18.70	15.75	10.79
Paper and paper products	32.51	32.17	27.97	20.18	17.83	16.32
Printing and publishing	25.91	28.91	25.88	21.17	21.11	18.51
Industrial chemicals	29.50	30.29	32.33	23.00	23.06	16.03
Other chemical products	26.21	23.83	23.41	21.39	22.70	23.21
Petroleum refineries	91.47	67.32	108.30	33.37	31.54	28.09
Miscellaneous petroleum and coal products	34.06	53.44	81.67	23.63	23.70	24.07
Rubber products	37.49	38.89	54.53	22.43	23.67	24.70
Plastic products n.e.c.	36.09	33.64	32.25	18.96	18.08	22.29
Pottery, china and earthenware	40.68	32.34	32.86	19.35	16.97	15.02
Glass and glass products	24.89	29.73	33.68	22.64	21.52	18.79
Other non-metallic mineral products	22.89	20.24	17.75	14.47	12.85	11.37
Iron and steel	39.76	37.56	49.57	21.74	18.73	21.56
Non-ferrous metals	74.00	46.01	64.31	20.40	17.03	20.28
Metal products	21.78	24.26	27.81	18.23	17.81	15.49
Non-electrical machinery	22.58	25.42	18.88	19.59	18.72	15.39
Electrical machinery	27.21	31.28	34.41	22.24	18.76	18.88
Transport equipment	26.56	30.92	24.76	18.24	18.68	15.16
Professional and scientific goods	14.37	24.57	33.40	16.65	15.51	14.01
Other manufactures	37.08	34.82	31.70	20.11	16.92	19.52
Total	29.50	29.93	29.22	18.39	17.19	15.13

Source: UNIDO database.

IV. SUB-SAHARAN AFRICA

A. Short-run outlook

39. The short-run prospect is for slow recovery of industrial growth for the region as a whole. The MVA growth rates are expected to climb to 4.0 per cent in 1993 and 3.6 per cent in 1994, from 1.1 per cent and 0.3 per cent in 1991 and 1992, respectively. These improvements in MVA growth rates exceed other sectors and lead GDP growth rates, which should increase from 1.1 per cent in 1992 to 2.5 per cent in 1993, and remain at that level in 1994. Although the manufacturing sector has performed better than other sectors in the past few years, its contribution to GDP is relatively small for the majority of countries in the region, and its importance in the economy varies from country to country. Thus, in Guinea the manufacturing sector accounted for only 1 per cent of GDP, while in Zimbabwe which has one of the largest, most diversified and better-integrated manufacturing sectors, the contribution was over 25 per cent of GDP. This improved performance is largely attributable to increased use of domestic raw materials in industries such as breweries, cement, confectionery, cotton textiles, chemicals, fish conserving, footwear, leather goods, oil refining, paper, paint and synthetic fabrics. The performance was also facilitated by relatively greater access to foreign exchange for imports of raw materials, spare parts and machinery.

40. Despite these encouraging developments, there were also several causes for concern. One was the sharp increase in production costs recorded in 1991. High real interest rates for working capital or investment and energy costs, including electricity and oil, were the major factors pushing production costs upward, and thereby adversely affecting the competitiveness of the manufacturing sector of the countries concerned. There were also problems related to the productive base of manufacturing companies. The upward trend in capacity utilization needs to be seen in the context of the low absolute rates of capacity utilization, which, at under 50 per cent, imply continuing and substantial idle capacity in the manufacturing sector. Low capacity utilization as a result of limited export markets for African manufactures and raw material shortages, with a corollary increase in unit costs, was compounded by the decade-long import compression and its

associated shortage of spare parts and equipment, preventing adequate maintenance and increasing the number of production breakdowns and lay-offs. The other problem is that the GDP projection given for 1993 and 1994 may not have fully reflected the effects of the economic recession in Europe, the main purchaser of Africa's commodity exports. To the extent that these projections are over-optimistic, domestic demand and foreign exchange availability will deteriorate.

41. However, the major problem facing sub-Saharan Africa is its external debt of $109 billion. Africa's debt may appear manageable in comparison with the $462 billion that the Latin American and Caribbean countries owe. However, relative to the weak economies in Africa, it dwarfs the Latin American problem. Thus, whereas Latin America's external debt amounted to about 50 per cent of GDP in 1992, Africa's stood at almost 119 per cent of GDP. Moreover, Africa's debt continues to grow, principally through the build-up of unpaid interest over the past decade. Africa now meets only half its debt-servicing obligations, and only after a very considerable struggle. Reportedly, Africa spends four times more on interest on its debts than on health. A succession of debt rescheduling deals, known by the places - Toronto, Trinidad - in which creditor Governments designed the deals, have been proposed in recent years. But to date, creditor Governments have cancelled only 11 per cent of concessional bilateral debts.

42. The long-term historical trend shows a slowing down in growth rates of MVA, which averaged 6 per cent a year for the region as a whole during the 1970s but fell to an average of 4.1 per cent a year in the 1980s. One explanation is the wide-scale introduction of import substitution policies in the industrial sector in the years immediately following independence. So long as world prices for the primary commodities - the bulk of the region's exports - remained relatively high, investment in industry (mostly by Government) was possible and laid the basis for these import-substitute manufacturing activities. As economic recession spread throughout the region in the 1980s when the debt crisis began to take hold, the weaknesses of that policy were underlined as commodity prices contracted, investment flows dried up and the purchasing power of domestic consumers fell, with a resultant contraction in industrial output.

43. Paradoxically, the growth rates appear fairly good when compared with those of world industry as a whole or with those of developing countries as a whole. Yet they give far too optimistic a view of industry in Africa. Relatively good growth rates mean very little when the industrial base is so small. Africa's share of world MVA in 1975 was some 1 per cent and, nearly 20 years later, it is still nearly at the same level.

B. Long-run prospects

44. The range of manufacturing activities in the region has displayed a lack of dynamism in the post-independence period. Where transformation of natural resource does take place, it rarely goes beyond the semi-processing stage. More than two decades after independence, Zaire, for example, was still sending a large part of its copper ore to be refined "on toll" in Belgium. Where manufacturing is aimed at the domestic market, the traditional sectors of brewing and tobacco still predominate, followed by textiles. Ventures into heavy industry have, in a large number of cases, resulted in a stream of costly "white elephant" projects. Moreover, the region's main trading partners have not encouraged the export of higher value added products. While the perceptions of West European investors have become increasingly inward-looking with perhaps a sideways glance at Eastern Europe, the spirit of enterprise in East and South-East Asia and parts of Latin America is alive and well. However, African Governments, with the exception of Mauritius, have seldom taken determined action to attract investors from Asia and Latin America despite the success of those investors in developing export markets in North America and Western Europe, and despite the relatively low costs at which bought-in management services, intermediate inputs and materials sourced elsewhere could be supplied from those potential investors from other developing countries and regions. The present document is not a forum to analyse the relationship between sub-Saharan Africa and Western Europe, but it should be emphasized that African countries have much to gain by cooperating with investors from the more dynamic industrial countries and regions of the world.

45. Africa's production structure remains highly skewed, and is concentrated in either semi-processing of export commodities or branches that are closest to final demand in the domestic market. The largest industrial branch in world industry in value terms is non-electrical machinery, followed by transport equipment, electrical machinery and food products. In Africa, the three largest industrial branches are food products, textiles and other non-metallic minerals. Most striking is the absence of machinery production, which indicates not only that the creative forces involved in technological terms in that subsector do not act as an agent of change in African industry but also that the region is highly dependent on imports not only of capital goods and a wide range of consumer goods, but also on many industrial inputs and management services.

46. Structural rigidity and resulting price distortions, especially in the agricultural sector, have become the main focus of reform in sub-Saharan African countries initiated by the World Bank. UNIDO is particularly concerned with the success of those African countries in handling structural changes in the manufacturing sector. In that context, it should be recalled that the most crucial structural change required in sub-Saharan African countries is the one that brings about a minimum level of industrialization in those countries. In most of them, a genuine industrialization process has either yet to take hold or is still in a nascent stage. On the other hand, industrialization is not only desirable, per se, but is frequently the chosen road for economic development in many of those countries. Under the circumstances, evaluating economic performance with the marginal rules of resource allocation advocated by the neo-classical school of economists would be clearly most inadequate, since those rules take the economic environment as fixed, and do not prescribe a process of change.

47. Given the vagaries of global macroeconomic trends and price fluctuations in international commodity markets, some Governments have taken strong initiatives and provided high public subsidies. That such policies have an economic rationality has long been argued by development

economists, and that such policies can be successful has been demonstrated in some of the dynamic countries of East and South-East Asia. The legitimacy of government leadership in a fledgling stage of industry stems from a judicious integration of industrial policy with technology policy, as well as a judicious blending of public and private entrepreneurships. An appropriate balance must also be struck between the resources devoted to building up critical "nodes" for the transfer and development of modern industrial technology, and the resources directed towards facilitating ever-wider popular participation in the process of industrial development, including the progressive upgrading of informal-sector activities.

48. The manufacturing sector of many countries in sub-Saharan Africa faces the challenge of reversing declining employment, labour productivity and wage earnings. Over the decade of the 1980s the sector has been afflicted by the confluence of several adverse factors such as: the global recession of 1981-1982 and the acceleration of the long-term decline in commodity prices on which the region is overdependent; the debt crisis; shortages of intermediate inputs, parts and machinery; declining availability of foreign exchange and high and fluctuating interest rates. The built-in inflexibility of many state-owned enterprises (where, for example, employees have tenure) coupled with managerial weakness wrought havoc to the manufacturing sector. The manufacturing productivity gap between North America and the region has widened over the last two decades. So has the relative wage differential. These general trends appear pervasive in the majority of manufacturing industries, with a few exceptions such as rubber products, pottery, china and earthenware. The region's manufacturing sector faces a Herculean task to reverse these trends and to begin the process of catching up with the developed market economies. Economists usually place emphasis on the importance of sensible macromanagement, involving control of inflation, money supply, interest rates, exchange rates etc. The case for this view has been amply demonstrated by the industrial experiences in sub-Saharan Africa as well as in Latin America and the Caribbean. However, in addition to physical capital, greater emphasis has to be placed on human capital and organizational-institutional capital. The latter two categories (or what might be called "indigenous capabilities") have fallen far short of their potential.

49. Technological capability has been defined as a broad set of elements comprising the entire complex of human skills (entrepreneurial, managerial and technical) needed to set up and to operate industries efficiently over time. As with all skills, the acquisition of technological capabilities is necessarily a learning process. All learning proceeds at a certain pace given the complexity of the knowledge involved and the initial capabilities of the learner. 7/ There are encouraging signs that the stock of scientists and engineers appears to be increasing rapidly in some countries of the region. Similarly, the number of science and technology policy-making bodies has increased in recent years from 69 in 1973, to 157 in 1979 and up to 197 in 1986. However, the extent to which these improvements have resulted in technical progress remains somewhat unclear. What is essential is that the linkages between research and technology, technological education and industrial production have to be strong and well articulated. The effectiveness of these linkages are largely a matter of institutional and organizational arrangements. With respect to organization and manpower issues, some combination of technological and organizational adaptation is essential for manufacturing efficiency. This has profound implications for national education, skills, and training institutions. Technology policy will be crucial for a correct response, and it will find expression in many areas. The necessary country policies will aim at the cost effective development of education and skills, the provision of consultancy services in engineering design and process layouts for small to medium-sized enterprises, and help with marketing and work organization changes.

50. Industrial rehabilitation programmes in sub-Saharan Africa repeatedly encounter skill shortages in middle management, supervisory staff, finance and marketing, accounting, quality control, repair and maintenance. Mismatches of skill supplies and demand present a perennial challenge even in developed countries, owing to imperfections, for example, temporal externalities, of labour markets and the long lead times involved after decision-making for training in urgently needed skills. In sub-Saharan Africa, the problem appears even more difficult because of the virtual non-existence of a functioning labour market in many countries of the region. While renewed efforts must be exerted to create a viable labour market to serve the industrialization process in the region, the education and training activities must be stepped up in order to make the industrial infrastructure more efficient. The causes of factory-level inefficiency have often been found to originate in a weak industrial infrastructure exemplified by temporary electricity cut-offs, telephone disconnections, water stoppage, delays in delivery of parts and components, non-availability of engineering troubleshooters and slow banking services. Modern factory systems require the efficient services of a modern tertiary sector that cannot be operated efficiently without well-qualified professionals, male and female. Research shows that one of the four predominant characteristics of women's labour force participation in the formal sector, especially as industrialization progresses, is their entry into the tertiary sector. Sub-Saharan Africa should undertake specific measures to ensure an adequate and increasing supply of professionals for the tertiary sector. The indigenous supply of these professionals seems very slow in materializing, with the delays undoubtedly related to the ineffectiveness of labour markets. Herein lies the central issue and the challenge for the region in the 1990s. As could be expected, studies reveal a high return on education for Africa. The social rates of return show 26 per cent for primary, 17 per cent for secondary and 13 per cent for tertiary education. But these rates could be an underestimation if the true external benefits of education and the long-run needs of the region are imputed in the calculation. "Brain drain" remains a very serious problem for the region and is one that cannot be easily corrected.

51. A trend of particular relevance to the industrial sector is the wide-ranging promotion of

---

7/ "Human resources and industrial development in Africa", UNIDO, PPD.208(SPEC.), p. 31.

privatization, particularly so as most of the large-scale industrial projects in Africa have tended to be wholly or partly state-owned. The poor performance of the majority of such industrial enterprises is ample testimony to often poor management practices and, frequently, inappropriate choice of products. However, it should not be forgotten that when factor prices are distorted, for example, by protectionist policies, feasible, profitable projects and their products often become unfeasible when the protection/price distortions are removed. In practice, privatization programmes in the region are proving painfully slow to implement and are encountering numerous obstacles. The UNIDO Global Report for 1992/93 (UNIDO publication, Sales No: E.92.III.E.4) has emphasized that while there is a considerable commitment to divestiture by most African Governments, this commitment has not been matched in practice by the speed of divestiture. Consequently, efficiency gains and, especially, urgently required public deficit reductions have also been delayed. These delays have occurred because of the very considerable constraints arising from economic conditions, including difficulty in mobilizing resources arising from an underdeveloped financial and capital market infrastructure, low domestic savings rates, distorted prices in factor and product markets, a weak administrative capacity and lack of foreign-investor interest. Given the lack of foreign-investor interest and weak institutional and administrative capacity, some of the benefits of full divestiture could be obtained by divesting operational management and control to the private sector, with asset ownership retained by the State. Full divestiture involving asset transfer is likely to be gradual and confined generally to countries with a better institutional and administrative capacity, and to sectors attractive to foreign investors.

52. In an era of economic liberalization, tenders for the purchase of public enterprises are perforce open to both national and foreign bidders. But confidence in the economic prospects of the region is being shown only by two distinct groups of foreign investors - those from former colonial powers who see natural opportunities and a small band of entrepreneurs new to the region but prepared to take high risks. Hence, the formerly state-owned electricity industry in Côte d'Ivoire is now run by the French state electricity company, and a pulp plant in Cameroon has been handed over to an Asian company. Yet unlike Latin America and the Caribbean or China, for example, no major upturn in foreign direct investment has occurred. It should be noted that to attract both domestic and foreign investors, various partial privatization arrangements could be considered. These may include privatizing management through management contracts, leases, contracting out and concessions. Furthermore, rather than restrict the market by excluding particular groups of investors while ensuring that an unhealthy concentration of economic power does not occur, various arrangements such as "golden shares" (portions of assets retained by the State) can also win acceptance of foreign and other buyers.

V. NORTH AFRICA AND WESTERN ASIA

A. Short-term prospects

53. In North Africa, MVA growth rose from 1.5 per cent in 1990 to 3.1 per cent in 1991; in 1992 MVA is expected to grow by 4.2 per cent and in 1993 by 4.9 per cent. This recovery pattern mirrors that of GDP growth. In Western Asia, MVA is expected to bounce back with 7.3 per cent growth in 1992 from 3.1 per cent growth in 1991. An MVA growth of 6.6 per cent is expected in 1993. It is remarkable that so far as industrial production is concerned, the destruction wrought by the Gulf War appears to have had little direct impact, except in Iraq, Jordan and Kuwait. The indirect impact, however, especially of the return of migrant workers, seems enormous and far-reaching, above all in the poorer countries of the region.

54. Most countries with the more diversified economies are taking serious actions to stimulate (or establish) their capital markets, draft new laws on labour and banking and exert efforts to standardized rules governing investment. In the case of the Syrian Arab Republic, moreover, the establishment of a stock market would be appropriate if the state-owned assets of the manufacturing sector were to be privatized.

55. In Tunisia, implementation of the Government's reform programme has in certain respects gone further than anticipated, but has lagged in others. Progress has been greatest in removing constraints on the private sector. Thus, the Government abandoned its main instruments for allocating resources when, in 1987, it dropped its prior authorization requirements for investment and most loans. Since then, only investors seeking the fiscal or financial advantages offered by various investment codes need authorization. The Government has also been successfully privatizing public enterprises in the face of a limited domestic absorption capacity and a delicate unemployment situation, and administrative barriers to entry into wholesaling have been removed. Competition is being fostered.

56. Tourism receipts for Morocco in 1991 dropped by 24 per cent to around $970 million, and Eastern European demand for its phosphate-based exports weakened considerably. Demand for agro-industrial and manufactured products exports, on the other hand, was buoyant in 1991. Imports declined and interest charges were reduced considerably following the cancellation of the Saudi debt ($2.7 billion). While the drop in tourism revenues and in phosphate exports turned the current account deficit (excluding grants) from 0.8 per cent of GDP in 1990 to 2.3 per cent of GDP in 1991, substantial external financial assistance and a record cereals harvest raised real GDP growth from 3.7 per cent in 1990 to 5.1 per cent in 1991. 8/

57. In the Gulf Cooperation Council (GCC) sub-region, the manufacturing sector, particularly in Saudi Arabia, received a strong impetus from the reconstruction work in Kuwait. This was supported by the GCC economic agreement that allows free flow of goods and services among its member countries. Industrialization in the next two years will be mainly dominated by the planned expansion of existing major industrial projects. This was projected to require more than $10 billion over the years 1992 and 1993. Most of the projects involve expansion of existing facilities, the majority of which are in the petrochemical industries. Financing will be sought from the

---

8/ Trends in developing economies, the World Bank, Washington, D.C., 1992, pp. 369-370.

commercial sector and not by concessional loans. Forms of financing would be either equity financing or foreign borrowings. Nevertheless, GCC countries will be concerned with the sluggish growth in world energy demand and with the impact of induced lower oil prices on their development plans. Energy demand and prices are particularly dependent on the recovery of the United States economy and on the recession in Europe.

58. In the fertilizer industry, increased demand for food caused by world population growth and changing consumption patterns, limitations on the availability of arable land, and the introduction of more intensive cropping and of higher yielding plant varieties, have all resulted in increased fertilizer requirements. Combined consumption of nitrogen, phosphate and potash nutrients should increase by 2.2 per cent per annum through the year 2000 (Stanford Food Research Institute estimates). The largest sources of demand for these nutrients are expected to be in Asia, particularly China and India. The fertilizer industry in the North Africa and Western Asian region therefore has good market opportunities in 1990s, at both the regional and international levels. However, the international fertilizer market is cyclical in nature as a result of factors such as farm income, weather conditions, world fertilizer capacity and government policies. These fluctuations will have a major impact on the Arab fertilizer industry in the region.

59. In petrochemicals, the GCC countries need to formulate a joint strategy in order to strengthen their position regarding an agreement with the European Community (EC) on petrochemicals tariffs. An alternative may be a trade pact with EC, covering petrochemicals, aluminium and refined petroleum products. However, EC is not expected to provide major market opportunities for GCC producers in the 1990s. The drop in energy prices in 1992, which may well continue during the rest of the 1990s, is likely to provide the industrialized countries with a competitive advantage for the establishment of increased petrochemical capacity that may be required in the current decade. Further investment in world-scale facilities may increasingly be based on the proximity of production sites to markets, or on the proximity of feedstock sources in case energy-rich countries such as Saudi Arabia are prepared to offer substantial discounts on international energy prices.

B. Long-run prospects

60. Industrial growth prospects seem essentially good. The region as a whole has abundant capital, resources - especially oil, a huge and growing domestic market for manufactured goods, and Governments willing to diversify the economy and make it more efficient, if necessary through greater emphasis on the private sector.

61. The process of privatization of major manufacturing enterprises is expected to continue slowly in Egypt and the Syrian Arab Republic. In Egypt, chairmen of the virtually autonomous holding companies controlling state enterprises have reservations regarding privatization, administration of the reform process by Government is weak and there is an inadequate number of competent enterprise managers to implement the radical changes required in working practices. In addition, Egyptian officials are concerned about the impact of privatization reforms on inflation and employment, and on the consequent possible social dislocation. In both countries, there is a preference for public sector reform that stops short of privatization of major industrial enterprises, particularly in sectors considered strategic. Downstream operations in the hydrocarbon sector (refining and distribution) in the Syrian Arab Republic might be opened up to private participation, while in Egypt the focus will be on medium and small enterprises, and on struggling firms partly owned by regional authorities in such subsectors as chemicals, fertilizers, refractories, cement, textiles and food processing.

62. In those countries with a small home market, the manufacturing sector will continue to be vulnerable to recessions in neighbouring countries, to import restrictions, and to high rates of customs duty. Increased efforts need to be exerted towards the creation of new export markets for manufactures because of continued change in market conditions in the countries of Eastern Europe and the former Soviet Union. Arab trade with the Council of Mutual Economic Assistance (CMEA) averaged around $8 to 10 billion during most of the 1980s, when the trade surplus averaged more than $2 billion in 1990 in favour of the Arab countries. In the region it will be necessary to build new trading and cooperation arrangements with the new countries of Eastern Europe and the former Soviet Union. Before the Gulf War, Iraq was the largest market for exports from Jordan. Aware of the importance of export market diversification following the Gulf crisis, the Government of Jordan is currently leading an intensive export market drive, particularly by introducing more sophisticated marketing techniques. Jordan aims to strengthen its trade relations with Western Europe, explore the Canadian market and improve and expand trade relations with South Asia, particularly the Indian subcontinent. Egypt and, to a lesser extent, Yemen are also emerging as relatively important trade partners with South Asian countries.

63. In Yemen, with government capital spending allocations being primarily directed towards infrastructural projects, efforts will need to be directed towards the establishment of an adequate framework to encourage private sector investment in industrial projects. Priority will be given to resource-based industries through the processing of agricultural and fisheries products and oil refining. Emphasis will be on the promotion of export industries since Yemen enjoys a good location with the port of Aden, and has a substantially underutilized skilled urban labour force, particulary in the Southern Governorates. Good prospects for industrial development will be influenced by Yemen's ability to find new export markets, particularly in East and Southern Africa and in Asia and the Pacific. However, constraints on industrial expansion will continue to relate in the short-term mainly to financial constraints and to the absence of an urban infrastructure necessary to support such expansion.

64. The Islamic Republic of Iran has a high potential for growth over the medium term. Besides construction, other sources of growth, that have been hitherto underpinned by continued reforms of the exchange, trade and price systems, are expected to be the commodity-producing sectors. In particular, a shift in relative prices towards tradeables should sustain agricultural and industrial growth. The very

large gas reserves of the country, moreover, can contribute importantly to electricity generation and provide the basis for petrochemical and metallurgical industries. Real GDP growth over 1992-1995 could feasibly average 4 to 5 per cent per year, enabling a modest growth of real incomes and consumption per capita. Medium-term export earnings should grow steadily partly owing to concerted ongoing efforts to increase oil and gas production and export volumes, and partly from reform-induced increases in non-oil exports, and planned investments and reforms in non-oil minerals. 9/

65. As Morocco moves out of its rescheduling phase, debt relief and, therefore, foreign savings should fall. Moreover, foreign savings, including increases in foreign investment, will mainly be directed to the private sector. These reduced foreign savings will have to be compensated by an increase in total domestic savings and the composition of domestic savings will need to change. Thus, an increase in government savings is one of the main preconditions for achieving the level of domestic savings that will be required in the 1990s. 10/

66. One of the greatest challenges facing the region, however, is the task of closing the gap in wealth and industrialization between the oil- and non-oil producing countries. The industrial growth of the former has been remarkable as in the case of Saudi Arabia. The oil producers are expected to forge ahead towards further industrialization through upstream and downstream investments based on oil. This usually involves highly capital-, energy- and technology-intensive industries. The diversification efforts will be accompanied by powerful incentive provisions such as free trade zones, zero-interest loans, low costs of water, electricity and other forms of energy, of feedstock from petroleum derivatives and of smelter input materials, as well as industrial sites and modern infrastructure, including telecommunications, transport, and harbour and airport facilities. Furthermore, relatively cheap labour from neighbouring countries could be employed. Non-oil producers in the region, in contrast, are usually over-populated and dispose of limited natural resources, and have low productivity and wages. In 1990, for instance, labour productivity (MVA divided by number of workers) in Egypt was $7,122 compared with $55,973 in Kuwait. Unless concerted efforts are made, the gap could widen further.

67. However, countries poor in natural resources could extricate themselves from low-equilibrium growth by the long-run accumulation of human capital. Indeed, in terms of literacy rates and school enrolment ratios, the region seems to have done better than sub-Saharan Africa, without matching the performance of the newly industrialized countries. In fact, by 1990 many countries in the region had achieved over 80 per cent, or even 90 per cent, of the industrialized North's average school enrolment ratio for primary and secondary schools combined (even though education of women is not encouraged in some countries of the region). Nevertheless, a recent study concluded that the GCC countries need substantial additional personnel in skilled and semi-skilled occupations as well as trained managers. Saudi Arabia, for instance, had 11,600 students enrolled in technical education in the 1985-1986 school year, whereas the country needed an estimated total of 124,500 additional personnel in all skill categories. In some countries of the region, women do, in fact, enjoy a high level of education and training. However they are usually employed in the public sector. Women are a valuable but not fully utilized source of qualified industrial personnel and countries would benefit by integrating them more effectively into the industrial development process throughout the region.

VI. SOUTH ASIAN SUBCONTINENT

A. Short-run outlook

68. The immediate industrial outlook is for substantial recovery with 8.0 per cent MVA growth in 1993 and 5.9 per cent in 1994, compared with a level of 3.5 per cent in 1992 and -0.2 per cent in the previous year. The recovery of industry is also predicated upon an adroit management of the balance-of-payments crisis triggered by the Gulf War and the disappearance of remittances coupled with the loss of trade with the former Soviet Union. Furthermore, new industrial policy packages adopted by India and Pakistan in 1991 and further policy reforms in other countries in the region are expected to give a considerable boost to industry and to their economies.

69. Shifting constellations in the former Soviet Union in 1991 prompted Pakistan to position itself as a strategic player between energy-rich Central and Western Asia and energy-poor South Asia. Pakistan is running out of domestic oil and gas resources, and by 2003 will be using four times more oil and petroleum products than at present. In face of the severe energy shortage that threatens Pakistan's ambitious development plans for an industrial growth rate of 8.3 per cent in 1993 and 8.6 per cent in 1994, the Government and private sector are seeking to take advantage of the multiple market opportunities and the energy supplies and other resources of the newly independent States of the former Soviet Union, in particular, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. In 1991-1992, Pakistan signed economic and trade arrangements with these countries involving energy, food and consumer goods, medicines, telecommunications and banking. During 1992, industrial output increased by 7.3 per cent compared with 6.8 per cent in 1991. Deregulation, privatization and import liberalization, together with enhanced fiscal incentives, boosted investment in manufacturing by over 32 per cent. Textiles, particularly cotton spinning, sugar, chemical and vegetable ghee industries as well as small-scale manufacturing showed significant output increases. While there was some decline in cotton yarn exports, most other exports, particularly garments and non-traditional exports, continued to increase strongly.

70. In India, the reform of industrial policy, which continued on the lines of earlier policy initiatives, was incorporated in the new industrial policy announced by its Government in July 1991. The process of structural adjustment continued in 1992 with sustained emphasis on fiscal consolidation and further reforms in the

---

9/ Ibid., p. 276.

10/ Ibid., p. 369.

trade, industry and financial sectors. Progress was also made in the improvement of competitiveness by extending the deregulation of domestic industry and by opening the economy to greater international competition. Reforms were reinforced in the 1993 budget, including wide-ranging reductions in tariffs, increased investment incentives including foreign investment liberalization and trade account convertibility of the rupee; this last reform is expected to give exports a strong push. Industrial output recovered strongly at 4.0 per cent growth in 1992 from -0.3 per cent in 1991, and liberalization of the trade and industrial policy regimes, which increased the supply of imported inputs, helped to stimulate output. Improved agricultural output provided a stimulus to the agribusiness sector, and capital and intermediate goods, as well as consumer durables, recovered strongly.

B. Long-run prospects

71. The industrial policy reforms adopted in the region, particularly those of India, appear destined to have positive growth effects throughout the 1990s. But the outcome will depend on how quickly and effectively the reform measures are implemented. Herein lies the real test of the government bureaucracy - a challenge to change long-entrenched habits formed during the regulatory regime before 1985. Nevertheless, there are some encouraging signs that habits are changing and successes are being reaped through a slow process of learning by doing. The Indian computer industry provides an example.

72. Creating and nurturing new industries like the computer industry and maximizing employment creation in conventional unskilled labour-intensive industries are crucial to industrialization. New industries aim at higher levels of value added through developing and mastering technology, as well as upgrading the skill content of human resources. Mere continuation (expansion) of unskilled labour-intensive manufacturing activities would not help raise the low level of labour productivity of manufacturing in the region.

73. The modernization of the manufacturing sector in the long run will require a fundamental policy shift with regard to upgrading human resources. Currently, the adult literacy rates for Bangladesh (35 per cent), India (48 per cent) and Pakistan (35 per cent) are among the lowest in the developing world. The same applies for average years of schooling. Therefore, more resources should be devoted to the eradication of illiteracy, the promotion of primary and secondary education and tertiary science and increasing the number of technology graduates. There are high rates of return on education in India, with primary education achieving the best results, and generally falling rates for higher levels of education. It should be cautioned, however, that such calculations do not include spillover intangible benefits.

VII. EAST AND SOUTH-EAST ASIA

A. Short-run outlook

74. Despite the recession and growth slow-downs in other regions, the East and South-East Asian region has been maintaining respectable GDP and MVA growth. Both short- and long-run prospects of industrial growth seem promising, although country- and area-specific problems abound, such as the threat of double-digit inflation (Hong Kong, Indonesia and the Republic of Korea), and overloading of infrastructure facilities (shortages of electricity, transport and communications facilities). Furthermore, numerous countries of the region show signs of shortages of both skilled labour and well-trained managers. The region as a whole is expected to achieve 7.4 per cent and 9.4 per cent MVA growth in 1993 and 1994, respectively, supported by 6.8 per cent and 6.3 per cent GDP growth respectively. This performance represents a small improvement over the 1991-1992 period, when MVA grew by 8.0 per cent and 5.6 per cent, and GDP by 6.7 per cent and 5.3 per cent, respectively. In view of problems of overheating in the growth-leading countries, overall restraints in growth-oriented policy would appear prudent. Malaysia, Thailand and the Republic of Korea, for example, are using fiscal and monetary brakes to slow their economies.

75. The industrial thrust of the region is expected to originate mainly in investment and trade, particularly within the region and between the region and Japan and China. Compared with other regions, the relative level of investment has been, and is expected to remain high. Indonesia, Malaysia, Republic of Korea, Singapore and Thailand, all fast performers in the industrialization race, have achieved a 35 to 40 per cent rate of investment (as a percentage of GDP), and are expected to do the same in the next couple of years. These activities will provide not only the Keynesian demand force but also will incorporate modern technology newly embodied in machines, equipment and new infrastructure. This process helps to upgrade the industrial base one step further. For instance, the computerization ratio in small- to medium-scale enterprises in the Republic of Korea increased to 54 per cent in 1991 from 25 per cent in 1989. The high rate of investment has been accompanied by a high rate of growth of trade in the region. While world trade grew by only 3 per cent in 1991, regional exports grew by 13 per cent (including intraregional exports) and imports 17 per cent (including intraregional imports).

B. Long-term prospects

76. By any standard, industries in the region have been performing admirably. With the exception of the Philippines, all countries and areas increased their MVA, total employment, labour productivity and wage earnings per worker between 1980 and 1990. The differences in labour productivity and wage earnings between countries are, however, striking. Singapore registered the highest per-worker MVA ($26,849) and wage earnings ($7,892) in 1990. The lowest figures were recorded by Indonesia.

77. The differences in wage rates, however, offer opportunities for investment and plant migration from high-wage economies to low-wage ones for labour-intensive industries. Thus, for example, as wage rates rose in the 1970s, apparel enterprises from the Republic of Korea and Taiwan Province of China moved to Thailand and Indonesia. In turn, skill-intensive industries such as semiconductors, automobile parts, electrical appliances and numerically controlled machines moved to the higher-wage countries in the region from Japan and the United States. This process of product diversification in the industrial structure and trade composition of the region

enabled it to avoid the consequences implied by the trade-pessimism hypothesis (namely, that the world market for labour-intensive goods would be limited if all developing countries emulated the newly industrialized countries' strategy of export-led growth).

78. The important question is whether the industrial dynamism of the region can be expected to continue through the 1990s and beyond. The affirmative response to this question is based on the view that as long as these countries continue to liberalize unilaterally their trade policies and to maintain current high levels of investment, the Asian market will continue to outpace growth in other major export markets, principally North America and Europe. It is also likely that real wages in Japan and the Asian newly industrialized countries will continue to increase faster than elsewhere in Asia, and as a result, the flow of direct investment from the higher-wage Asian countries to the lower-wage Asian countries will be maintained for some time to come. Since intra-Asian direct investment appears to complement and reinforce intra-Asian trade, the bias in favour of intraregional over interregional trade is likely to grow stronger.

79. One of the distinguishing features of the Asian newly industrialized countries is that they are not only adept in producing goods cheaply but they excel in marketing them abroad. Some of these countries have large trading companies of their own with a world-wide sales network, which perform a multiple task of selling, buying, brokering, financing, insuring and shipping. A few Asian countries benefit from the so-called Chinese diaspora, which functions as a giant trading network. Many electronics products produced in these countries even bear their own brand names and are promoted world-wide with active advertising campaigns. Professional market research firms are being created. Up to now, these traders handled only those products originating from or to their own countries. With the rapid expansion in regional trade, however, they are becoming multilateral and international traders. International trading and marketing, the traditional preserve of the more advanced developed countries, have therefore been successfully encroached upon by a few developing countries for the first time. And products marketed by these Asian traders abroad carry less-imposing prices because the trade margins charged by them are less forbidding, introducing a completely different dimension to the traditional international product price competition.

VIII. CHINA

A. Short-run outlook

80. Both the short- and long-term outlook for industrial growth seem promising. Inflation has apparently been tamed thanks to the austerity programme imposed since 1989, and trade surpluses since 1990 are providing policy makers with greater room to manoeuvre. Domestic savings and investment are keeping pace with the high levels maintained by the neighbouring newly industrialized countries, and inflows of foreign direct investment have accelerated. Industrial reform and restructuring have been progressing rapidly, despite some confusion about the final shape of "market socialism with a Chinese character". However, the greatest challenge remains in meeting the ever-increasing demand for high-quality managers, engineers and scientists to help push Chinese industry towards higher levels of technology content.

81. Short-term prospects are good for 1993 and 1994. The rate of GNP is expected to grow by 11.0 per cent in 1993 and 10.0 per cent in 1994 respectively, compared with 12.8 per cent in 1992 and 7.5 per cent in 1991. Some non-government observers, however, are predicting even higher growth in 1993 and, with the threat of overheating of the economy, measures are being taken to slow down money supply growth and wage increases. As usual, the industrial sector will lead the growth of other sectors with a rate of 15.0 per cent in 1993 and 13.0 per cent in 1994. These figures compare with 20.4 per cent industrial growth in 1992 (at double the planned target) and 7.6 per cent in 1991. The leadership of the industrial sector will be supported by the favourable trade surpluses recorded in 1992 ($5.4 billion) and 1991 ($8.1 billion). A trade surplus of only $0.6 billion is expected for 1993 (a deficit was recorded in the first half of the year), as policy makers seize the room for manoeuvre with respect to importing industrial inputs and technology. The availability of the latter determines industrial growth in a special way. China's exports are expected to continue to rise, growing by 16.0 per cent in 1993 and 15.0 per cent in 1994. 11/

82. An additional source of industrial vitality is provided by two factors, namely, township-village-based community enterprises and foreign direct investment. Both operate freely on the basis of market forces and competition in purchasing inputs and selling outputs, unlike the state-owned enterprises. These enterprises are significant in China, both for their overall employment impact and for the opportunities (current and potential) they offer to women for entrepreneurship and for involvement at management and decision-making levels of these enterprises. Industrial output from township-village-based community enterprises grew by over 15 per cent in 1989 and 1990, when an austerity programme was imposed on the entire economy in order to fight run-away growth and inflation. Furthermore, many such enterprises serve not only domestic but also overseas demand. In 1984-1985, the share of such enterprises in the total foreign exchange earnings of China was only 4.5 per cent, but it soared to 20.8 per cent by 1990. This development has created new rural linkages in the flow of goods, services, capital and technologies from abroad. According to the Asian Development Bank, FDI increased markedly in 1992. Pledged and actual FDI rose to $57.5 billion and $11.2 billion, or 480 per cent and 260 per cent, respectively, exceeding that in 1991. However, mainly as a result of past policies restricting the sale of products of foreign-funded enterprises on the domestic market, most FDI has been earmarked for small-scale, labour intensive and service-oriented projects. The original goals of bringing in advanced technology and management skills to upgrade Chinese industry were largely not attained. However, there is increasing awareness that FDI can provide not only capital technology

---

11/ Asian Development Outlook, Asian Development Bank, Oxford University Press, 1993, pp. 86-87.

and management skills, but also competition that can force domestic enterprises to improve their efficiency.

B. Long-run outlook

83. The process of introducing market mechanisms has been uneven, with a "stop-go" pattern of policy pronouncements, as evidenced by the shifting emphasis of the debate between the conservatives and reformists during the past three or four years. Nevertheless, the available evidence provides encouraging signs concerning the long-run development of the process. Work done at the Economic and Social Commission for Asia and the Pacific (ESCAP) has suggested that at present, the market mechanism in China is imperfect. Along with pushing forward economic reforms, China's economic system should be accompanied by a series of applicable policies. The changes required involve three aspects:

(a) Decentralization, which in China is called "simplifying the administration and giving more decision-making powers to the local Governments and local enterprises";

(b) Promoting the commodity economy and invigorating production and circulation activities;

(c) Open-door policies.

84. According to the Asian Development Bank, some concern has arisen about the overexpansion of capital investment. Fixed investment expenditure is estimated to have increased by about 38 per cent in 1992, the highest growth in the past four years. Much of the increased investment was added to existing capacity in such industries as mechanical and electrical equipment; while investment decreased proportionately in areas that needed expanding such as energy, raw materials and transportation. Soft budget constraints and the lack of market-driven, self-regulatory mechanisms provided incentives for enterprises and localities to overexpand investment. One lesson from the past is that excessive investment is a leading cause of the "stop-go" episodes. However, direct control of the scale of investment has become more difficult for the Government, partly because only about 10 per cent of investment funds now come from state budgets. 12/

85. Financial sector reforms are also in progress. The newly developed non-bank financial organizations have played an increasing role in financing non-state sector activities. Such organizations include cooperative investment foundations, savings and loan associations, trust investment companies, and national and regional stock markets. In the rural areas, farmers' credit cooperatives have become major sources of finance for rural economic development. These market-driven financial institutions have great flexibility in determining interest rates, raising funds and deciding where to invest them.

86. With the intensification of reforms in the financial system many people have found more investment options. A rapid expansion of the securities market allowed consumers to shift expenditure away from commodities to bonds and stocks. Reforms governing house ownership also induced a change in consumption behaviour in favour of long-term savings. Further reforms of state enterprises are expected to increase their independence from the State and to make them fully responsible for their production, investment and employment decisions.

87. The services sector will benefit from the recent government decisions on accelerating the sector's growth and reform. The new target for development of the services sector is an annual growth rate of 11 per cent for the rest of the decade. Priority will be given to transport, telecommunications, science and technology, and education.

IX. EASTERN EUROPE AND THE FORMER SOVIET UNION

Introduction

88. In terms of industrial structure, a major difference between these countries and the market economies of Europe is the size of enterprises and the degree of industrial concentration within each industry. There is a relative absence of small and medium-sized enterprises in the region. In Poland, for example, of 825 identified markets, 516 (62 per cent) had leading enterprises with a market share of more than 30 per cent and over 25 per cent had a leading firm with over 60 per cent market share. The industrial structure of the region reflects the fact that industry was developed to serve the needs of a command economy. The average size of a Soviet-type enterprise is more than 10 times that of the average firm in the same type of industry in a developed market economy. Often one or two large enterprises dominate an industry or a product line. Enterprises also were highly dependent on input and output markets in the former Soviet Union. Demand was guaranteed and in many cases still is. Industrial enterprises across the region were highly integrated, both horizontally and vertically. As a result, it is not uncommon now for an airplane factory to produce everything from bolts to seat covers. In Western Europe it is not uncommon for firms to be either horizontally or vertically integrated, but rarely are they both.

89. Because energy prices were highly subsidized and remain so in much of the region, the energy and material consumption of most enterprises in the region is well above the Organisation for Economic Cooperation and Development (OECD) norm for the given level of technology. In addition, the technology level is generally outmoded and energy-inefficient. Recent investment has been concentrated only in certain sectors, primarily the military. And, while some of the countries of the region had very strict environmental protection codes in place for the regulation of air and water emissions, until recently little if any enforcement has taken place.

90. The structure of production, especially in the former Soviet Union, Bulgaria and Romania, was extremely complex, consisting of specialized monopolies that manufactured products in a very sophisticated division of labour across the region. For example, within the Soviet Union, the Baltic States were given the role of producing many of the high-technology goods, particularly for the former Soviet military industrial complex. Of the nearly 600 "all Union"

12/ Ibid., p. 88.

enterprises built in Lithuania, most produce or produced relatively sophisticated electrical, chemical, computer and other knowledge-intensive products. Kazakhstan, on the other hand, was almost exclusively a mineral supplier, with most processing taking place in the Russian Federation.

91. Enterprises in the region are also characterized by large amounts of inter-enterprise debt. As credit was tightened in the early days of transformation, enterprises began to fund themselves through the process of non-payment. Enterprise A would not pay enterprise B until it was paid by enterprise C. But enterprise C often went bankrupt. The level of such debt is now staggering, particulary in the Commonwealth of Independent States. In the Russian Federation for example, inter-enterprise debt rose from R 40 billion at the end of 1991 to R 751 billion at the end of March 1992, more than twice the amount of bank credit during the same period.

A. Short-term outlook

92. After two years of sharp economic contraction (over 20 per cent) in the Central European group, 1992 saw a bottoming out of the drop in output in the former Czechosolvakia and Hungary over the year, while Poland registered growth in its GDP estimated at 0.5-2 per cent. In 1993, the upturn is expected to continue in Poland (2 per cent) and begin in Hungary (0-3 per cent) and the Czech Republic (1-3 per cent). Much will depend on the economic performance of Western Europe, particularly Germany, which is now in deep recession. As a result of the split of Czechoslovakia and decreased trade, Slovakia will experience continued contraction (-3 per cent). In Slovenia, the downturn is expected to bottom out this year. MVA growth was estimated for 1992, in Hungary and Poland, at -8.5 per cent and 3.4 per cent, respectively, with the forecast at -1.6 per cent and 1.5 per cent for 1993 and 1.9 per cent and 4.0 per cent for 1994.

93. Bulgaria and Romania continued to experience severe contractions in their economies in 1992 of 22 per cent and 15.4 per cent, respectively. The year 1993 is expected to be more moderate, but the trend will continue downward. Albania is in a critical situation as the poorest country in Europe and will see little improvement without massive amounts of outside assistance.

94. The Republics of the former Soviet Union have seen some of the sharpest drops in output and income across the region, especially the five Central Asian Republics. While contractions in 1991 were more modest, inconsistencies in the reform programme and the collapse of inter-republican trade, together with the unrestricted printing of roubles anc extension of credits to failing enterprises, led to sharp increases in the money supply, hyperinflation (an average of 1,750 per cent for the year) and large drops in output in 1992 (18.5 per cent for the Commomnwealth of Independent States as a whole). The Baltic States also experienced a sharp contraction of economic activity in 1992, ranging from 28 per cent in Estonia to 43.9 per cent in Latvia. The ambitious transformation programmes the three countries chose after declaring their independence in the fall of 1991 were constrained by the collapse of trade with rest of the former Soviet Union, and the unreliability of the supply and erratic increases in the price of Russian Federation oil and gas, upon which they are highly dependent.

95. The brunt of the recession has been borne by the industrial sector. Over the 1989-1992 period, industrial output across the region as a whole declined over 40 per cent. In many of the countries, industrial output is now at 1975 levels or below.

B. Long-run prospects

96. Several factors have contributed to the fall in output across the region. The most important are the distorted economic structures inherited from the past, the implementation of radical economic reforms and the collapse of trade between members of the Eastern trading arrangement, the Council for Mutual Economic Assistance (CMEA), in 1991. These, however, mask more fundamental problems inherent to the region, micro-level rigidities and structural imbalances, particularly inefficiency at the enterprise level that have resulted in an anaemic supply response to the incentives that should have been induced by macro-economic reforms.

97. The fact that the macro-level reforms did not bring about the desired supply response should not be surprising. Macro-level reforms can do little for industrial inadequacies such as those characteristic of the command economies: lack of an entrepreneurial cadre and a thriving private sector, inadequate technology, a lack of managerial and supervisory personnel, and a shortage of financial institutions to ensure the proper monitoring of enterprise performance. They also can do little to directly ensure adequate accounting, management information and quality control systems. These are the real impediments to the economic development of the countries of the region.

98. Along with the restructuring of the industrial base, the sustainable growth of the region will depend on its integration into the world economy. Without an outlet for its goods and access to hard currency, transformation will be slowed. But integration will be a formidable task. Trade is becoming more regionalized in trading blocs that increasingly exclude those outside the region (three quarters of the world's trade takes place within trading blocs and 60 per cent of European Community trade in 1989 was within the Community). The West and the European Community in particular must be amenable to imports from the Central and Eastern Europe and the former Soviet Union if these countries are not to be marginalized.

X. CONCLUSIONS: TECHNOLOGICAL CAPABILITY AND INDUSTRIAL COMPETITIVENESS

99. The abandonment of central planning in Eastern Europe and the former Soviet Union along with market liberalization movements in developing countries have engendered new appreciation for an old institution - the market mechanism. It has become increasingly clear that functioning market institutions cannot be created overnight by decree, that bankers must be trained to recognize the potential profitability of projects and to take risks rationally, that engineers should be retrained to be cost-conscious in combining intermediate inputs and that enterprise managers should be trained in marketing skills in order to compete in the market-place.

100. International competitiveness in the field of industry is becoming an increasingly important and

complex concept, yet the (re)attainment of international industrial competitiveness is a sine qua non for developing countries seeking to accelerate and sustain their industrial development over the long term. Industry has to drive overall socio-economic growth, inter alia, by building on opportunities arising in international markets. These opportunities can be seized if the capabilities exist or can be created in the industrial structures of various developing countries to technologically upgrade these industrial structures.

101. With its broad connotations for the human dimension of development, human resource development is of central concern in the industrial context. It is an important precondition for, as well as a result of, industrialization, that is, it is both an investment good and a consumption good in the jargon of economics. It relates not only to the educational and training system at the national, regional and enterprise levels, but it is also closely associated with building up capabilities for the development, transfer and absorption of technology and in the provision of solutions to a whole range of strategic industrialization issues. Central to the discussion of human resource development for industry is the need to create and upgrade continuously the skills, motivation and know-how required by industry and the need to utilize fully the human capabilities essential to achieving dynamic industrial growth. This is also borne out by the new patterns of industrial development and competition in world economy which indicate that: (a) a high skill level is a key determinant for an economy's competitiveness; (b) human resource development is an essential part of a country's industrial structural adjustment process; (c) the ability of a country to upgrade and reconvert industry-related skills is a major instrument in combating unemployment; (d) an economy needs enhanced and focused skill generation in order to seize opportunities in advancing industries and rapidly changing markets, as well as to increase the pace of innovation in production.

102. After the recent political events in Eastern Europe and the economic reforms in many developing countries, the free market model has been restored to the central position in economics from which Lord Keynes had dislodged it only temporarily. The "magic of the market" is now presumed to cure all problems in both developed and developing countries, thereby dismissing the validity of the theory of economic development. But the crucial difference between developing and developed countries lies in the extent of the development of their markets. Policy prescriptions must distinguish between industrialized economies with highly developed goods and capital markets and developing economies with poorly developed or - especially at the present time - collapsed markets. Markets sometimes behave in a perverse manner - as the collapse of the Exchange Rate Mechanism in Europe has shown. A vital task for Governments is to create an enabling environment that facilitates economic and industrial development in developing countries, as well as in the countries of Eastern Europe and the former Soviet Union. Collective social decisions can play an important role in providing public good and stability in markets, and in capturing scale economies, as well as in protecting those who do not have the strength to benefit from the market. It seems clear that a degree of macroeconomic planning, and industrial regulation is also essential - for example in the areas of human resource development (including industrial training) and technology policy, where private costs and benefits often diverge markedly from social costs and benefits. The problem for Governments and the international community is to decide the fine balance between too much and too little intervention, between too much and too little protection, and between too much and too little privatization.

Distr.
GENERAL

ID/GC.5/16
28 September 1993

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 10 (f) of the provisional agenda

THE REGIONAL DIMENSION: TECHNICAL ASSISTANCE TO THE PALESTINIAN PEOPLE

Report by the Director-General

Summary

Updates the information contained in document IDB.9/10/Add.1 and in chapter VIII of document GC.5/10, and reports on the progress made in the implementation of decision IDB.11/Dec.14, in compliance with paragraph (h) of that decision.

CONTENTS

	Paragraphs	Page
Introduction	1	1
Chapter		
I. ACTIVITIES UNDERTAKEN BY UNIDO	2 - 5	1
II. ACTION REQUIRED OF THE GENERAL CONFERENCE	6	2

Introduction

1. At its fourth session, the General Conference in resolution GC.4/Res.7 requested the Director-General to report to the following session of the Board and to the General Conference at its fifth session on the progress made in the implementation of that resolution. Since the adoption of that resolution, progress reports have been submitted to the Board at its ninth (IDB.9/10/Add.1) and eleventh sessions (GC.5/10, chap. VIII). The present document, which updates those reports, provides information on action taken as a follow-up to the eleventh session of the Board in accordance with its decision IDB.11/Dec.14.

I. ACTIVITIES UNDERTAKEN BY UNIDO

2. Guided by the resolutions of the fourth session of the General Conference and the decisions of the ninth and eleventh sessions of the Industrial Development Board, UNIDO continued its efforts to promote and pursue a programme of technical assistance to the Palestinian people.

3. For that purpose consultations and contacts were maintained with the United Nations Development Programme (UNDP), the United Nations Conference on Trade and Development, the United Nations Relief and Works Agency for Palestine Refugees in the Near East and the Office of the Permanent Observer of Palestine to UNIDO. An effective working relationship was developed with the UNDP office in Jerusalem that will allow UNIDO to develop technical assistance activities for the Palestinian people in the occupied territories, e.g.:

(a) Preparatory work having been completed, the workshop for entrepreneurs of small industries, funded through a trust fund from Japan, is scheduled to be carried out in November-December 1993 in Vienna;

(b) Project proposals for similar group training programmes in 1994 and 1995 to train small industry entrepreneurs, management personnel and consultants are under preparation for submission to potential donors;

(c) Assistance is being provided in connection with the preparation of a feasibility study in the field of cement industry.

4. UNIDO took part in the United Nations Seminar on Assistance to the Palestinian People (Paris, 26-29 April 1993). In that meeting, a programme for development of the Palestinian national economy for the years 1994-2000 was presented.

V.93 88773 6160E
Distr.: 4 October 1993

The programme formed an important step for the basis of technical cooperation by the United Nations system, bilateral donors and non-governmental organizations for providing assistance to the Palestinian people. Major industrial needs are envisaged in the programme, which will broaden the opportunities of UNIDO assistance to the Palestinian industrial sector. UNIDO also participated in the Meeting of the Panel of Experts on the Living Conditions of the Palestinian People (Geneva, 28 June - 2 July 1993) with a view to considering measures for improving the living conditions in the occupied territory. Furthermore, UNIDO was represented at three seminars sponsored by the United Nations on the question of the Palestinian people held in New York and Vienna.

5. The Declaration of Principles signed on 13 September 1993 opened a new chapter for the West Bank and the Gaza Strip. One of the most urgent tasks is to establish a sustainable basis for economic and social development through expansion of productive sectors where industry has to play an important role. UNIDO stands ready to join in the efforts of the Palestinian people in this regard and is hopeful that Member States would enhance their cooperation for the industrial development in the territories.

II. ACTION REQUIRED OF THE GENERAL CONFERENCE

6. The General Conference may wish to take note of the present progress report.

Distr.
GENERAL

GC.5/17
4 October 1993

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 10 (e) of the provisional agenda

THE REGIONAL DIMENSION:

INDUSTRIALIZATION OF THE LEAST DEVELOPED COUNTRIES

Report by the Director-General

Summary

Reports on progress made in continuing to accord highest priority to least developed countries in programmes of the Organization, as requested by the General Conference in its resolution GC.4/Res.9, paragraphs 3 and 4, and on action taken to implement the Industrial Action Programme adopted in resolutions GC.4/Res.10 and GC.4/Res.5.

CONTENTS

		Paragraphs	Page
Introduction		1 - 2	1
Chapters			
I.	DEVELOPMENT OF HUMAN RESOURCES	3 - 5	2
II.	INDUSTRIAL DEVELOPMENT IN RURAL AREAS	6 - 7	2
III.	MACROECONOMIC CONDITIONS AND MOBILIZATION OF FINANCIAL RESOURCES FOR INDUSTRIAL DEVELOPMENT	8 - 14	2
IV.	DEVELOPMENT OF THE INDUSTRIAL SERVICE, SCIENTIFIC AND TECHNOLOGICAL BASE	15 - 27	3
V.	INTEGRATION OF WOMEN IN INDUSTRIAL DEVELOPMENT	28	5
VI.	OTHER ACTIVITIES	29 - 30	5
VII.	ACTION REQUIRED OF THE GENERAL CONFERENCE	31	5

Introduction

1. In its decision IDB.11/Dec.13 the Industrial Development Board requested the Director-General to report to the fifth session of the General Conference on the implementation of Conference resolutions GC.4/Res.9 and GC.4/Res.10. Resolution GC.4/Res.9, within the context of the Paris Declaration and the Programme of Action of the Second United Nations Conference on the Least Developed Countries, calls upon the Director-General (a) to continue to accord highest priority to the least developed countries (LDCs) in programmes of the Organization including, in particular, the use of funds from the Special Industrial Services, the Industrial Development Fund and other resources available to UNIDO; and (b) to develop and strengthen key priority sectors in the medium-term plan of UNIDO within the context of the implementation of the Programme of Action. In resolution GC.4/Res.10 the Conference adopted the Industrial Action Programme for the Least Developed Countries (reproduced in document PI/114) as the basis for development and implementation of technical cooperation projects and programmes between UNIDO and LDCs in the 1990s.

2. Since 1991, a concerted effort has been launched to programme and utilize available funds allocated to least developed countries in

V.93 88967 6176E

Distr.: 11 October 1993

accordance with the priorities set out in documents PI/114 and GC.4/40. Accordingly, a UNIDO-wide action was undertaken to prepare programmes and projects for consideration under various sources of financing. Emphasis was placed on the areas highlighted in the Industrial Action Programme, i.e.: human resource development; industrial development in rural areas; review of macroeconomic conditions and mobilization of financial resources; development of industrial, service, scientific and technological base with the focus on rehabilitation, privatization, small- and medium-scale industries, transfer of technology, transport and communications, and environment and energy; integration of women in industrial development; System of Consultations; international economic cooperation; and arrangements for implementation, follow-up, monitoring and review of the Industrial Action Programme. In all these areas the approach of the integrated programme strategy involving mutually supportive activities is being applied. A report on recent activities relevant to the two Conference resolutions is provided below. Reference is also made to the Annual Report of UNIDO 1992, IDB.11/10, chapter III, paragraphs 56 to 62.

I. DEVELOPMENT OF HUMAN RESOURCES

3. The mobilization and development of human resources is considered a crucial factor in promoting sustained and increasingly self-reliant socio-economic development in the least developed countries. To enhance human resource development in developing countries, increased attention was paid during 1992-1993 to training needs as well as to formulating policies and strategies in this area and developing effective training systems at all levels.

4. In training activities developed for LDCs the main concern was to meet the challenges imposed by new technologies, such as the introduction of computers as an integral part of the production process (CAD/CAM), as well as the acquisition of technology, skills and know-how for the effective transfer of technology. An example is the seminar held at Burkina Faso (9-14 November 1992) on computer-based training in the field of tools and spare parts production. Since 1991, growing numbers of participants from LDCs have attended fellowships and study tours initiated by UNIDO (13.8 per cent in 1991 and 14.5 per cent in 1992). Participants from LDCs in group training programmes represented 22.5 per cent in 1991 and 20 per cent in 1992. Three regional workshops were organized on identification, design, appraisal, monitoring and evaluation of technical assistance projects for anglophone (27-30 May 1991) and francophone (26-30 April 1993) African LDCs and the Asian LDCs (30 September-4 October 1991) in which a total of 58 decision-makers participated. A one-month seminar on the support programme to mobilize financing resources for industrial development in the least developed countries was completed at Bangkok, Thailand, for the Asian LDCs (15 February-12 March 1993) and will also be held at Arusha, United Republic of Tanzania, for anglophone (27 September-22 October 1993) and francophone African LDCs (4-29 October 1993). About 60 representatives from LDCs will have been trained through this support programme in cooperation with training institutions like the Asian Institute of Technology at Bangkok, Thailand, and the Eastern and Southern African Management Institute at Arusha, United Republic of Tanzania.

5. Activities for the industrialization of LDCs have further focused on locally available raw materials and valorisation of indigenous products as well as quality control and assurance. The type of projects undertaken ranged from institution building, strengthening infrastructural facilities and research capabilities to direct assistance to local industries. Considering that training of local counterparts, entrepreneurs and their staff is a key to the success of technology development and transfer in all industrial subsectors, projects in those subsectors placed particular emphasis on human resource development. During 1992, greater awareness of the importance of human resource development strategies was created during the preparations of the fifth programming cycle of the United Nations Development Programme (UNDP).

II. INDUSTRIAL DEVELOPMENT IN RURAL AREAS

6. An essential component of any rural development strategy consists in the establishment of forward and backward linkages between industry and the rural economy, as well as the promotion of non-agricultural and off-farm employment and income generation opportunities through small-scale and microindustries in rural areas. In 1992 UNIDO convened an inter-agency working group on industrial contribution to rural development. A study on rural industries and poverty alleviation was prepared for the meeting, which played a catalytic role in sharing the experience of various United Nations agencies.

7. Other activities included the development of a programme to promote small-scale industries in the Tigray Province of Ethiopia, and technical cooperation projects to promote rural industries in Guinea, Guinea-Bissau, Mozambique, Myanmar, Sierra Leone, Solomon Islands, Uganda and Zambia. These projects were intended to strengthen or develop national capacities at the government and/or at the private-sector level or strengthen the capacities of the entrepreneurs and employees themselves. Of these, the projects in Guinea, Mozambique, Sierra Leone, Solomon Islands, Uganda and Zambia established mechanisms for a revolving fund to channel financial resources to rural entrepreneurs for setting up new enterprises or expanding existing production facilities. The problem of collaterals received an innovative treatment in those projects to allow the flow of finance to rural entrepreneurs to increase in real terms. The projects also created national capacities to train entrepreneurs as well as workers in managerial and technical skill upgrading through appropriate institutions. Progress was made in enhancing community participation in rural industry development in Sierra Leone and Zambia.

III. MACROECONOMIC CONDITIONS AND MOBILIZATION OF FINANCIAL RESOURCES FOR INDUSTRIAL DEVELOPMENT

8. A macroeconomic policy framework is intended to provide a basis for overcoming the structural bottlenecks confronting LDCs, leading ultimately to their industrial transformation and contributing to the eradication of poverty.

9. The development of "seed" programmes is a recent concept, now generally accepted, has proved to be an important initiative of UNIDO for LDCs (see also IDB.11/10, chap. III, paras. 57

and 58). The second phase of the "seed" programme to promote the traditional textile industry in West Africa consists of several complementary grassroots projects and activities such as training and product development, marketing, creation of a national tissuthèque, and financing of rural and micro-enterprises. A second "seed" programme for traditional woodworking industries is ongoing in Benin, Burundi, Rwanda and Togo. The informal sector being the main target, these programmes cover the priority areas of the Plan of Action for the LDCs i.e., rural development, development of micro and small-scale industries, human resource development, integration of women in industrial development, transfer of appropriate technology and skills and other complementary supports in the areas of access to markets for their exports. With a trust fund from Japan, the "seed" programme on the development of the traditional textiles in West Africa was implemented and the second phase is under consideration.

10. Numerous projects have been implemented by UNIDO to assist in setting up macroeconomic policy frameworks in the LDCs. In Bhutan, an important contribution was made by UNIDO to the elaboration of the country's seventh five-year plan for industrial development with emphasis on the private sector. In particular, the UNIDO team assisted the departments of trade and industry in capacity building. Industrial information systems for decision-making were implemented in Bhutan and Nepal, with local information networks becoming fully operational in the respective ministries of industry; in Bhutan assistance was also provided in implementing an industrial census. Three investment technical cooperation programmes were recently completed in Mali and advisory services were provided to the Governments of Gambia, Mali and Zambia on legal, institutional and fiscal measures aimed at the creation of an enabling environment for private investment. Assistance was extended to investment-related institutions in Guinea, Mali, Uganda and the United Republic of Tanzania, involving the establishment of data banks for investment promotion, and the identification of investment opportunities in targeted subsectors.

11. Advisory services were extended to Mali for the updating of its investment code and the investors' guide to Gambia was updated. As part of the UNIDO integrated technical cooperation programme financed by UNDP, the Nepal Investment Forum was held in 1992. Prior to the Forum, UNIDO assisted in the identification, formulation and screening of industrial investment projects.

12. As an outcome of the expert group meeting on the development of export processing zones (EPZ) held in Vienna in 1992, the establishment of new EPZs and the improvement of the performance of existing EPZs was facilitated. Technical cooperation activities in the area covered advice, pre-feasibility studies and training in the operation, management and promotion of EPZs. For example, a preliminary investigation on the viability of an EPZ in Vanuatu was completed; assistance in management, promotion and marketing techniques was provided to the EPZ in Togo; study tours were organized for EPZ planners such as those from Djibouti.

13. In a number of LDCs in Africa like Burkina Faso, Burundi, Madagascar, Mauritania, Niger and Rwanda, technical cooperation efforts focused, inter alia, on enhancing the participation of private sector entrepreneurs themselves so as to organize and provide the necessary institutional support mechanisms and the required services. An ongoing large-scale project initiated in Zaire in 1991 aims to create local consulting firms for private small- and medium-scale industries in several provinces that will provide services to entrepreneurs and become self-sustaining after three years. During 1992-1993, technical cooperation activities with particular focus on entrepreneurship development programmes continued to be implemented in Bhutan and Malawi, and were initiated in Nepal as a means to establish or expand small- and medium-scale industries.

14. In accordance with paragaph 3 of resolution GC.4/Res.9 special effort was undertaken to programme and utilize funds from the Regular Programme of Technical Cooperation, Industrial Development Fund (IDF), the programme for the Industrial Development Decade for Africa (IDDA) and the Special Industrial Services (SIS) programme for the benefit of LDCs. 1/ Thus, the Regular Programme financed several regional and interregional projects for LDCs, including: the preparatory phase of a programme on the promotion of traditional wood industry in LDCs of Western and Central Africa; the organization of workshops on the support programme for the mobilization of financial resources held at Arusha (see para. 4 above); and the regional project for the development of agro-industries in LDCs of Asia and the Pacific. From the IDDA resources, the total amount of projects implemented during the biennium 1992-1993 in LDCs is estimated at $2.68 million, covering mainly agro-related activities with emphasis on food industries and institutional support.

IV. DEVELOPMENT OF THE INDUSTRIAL SERVICE, SCIENTIFIC AND TECHNOLOGICAL BASE

A. Rehabilitation

15. The industrial rehabilitation and modernization programme of UNIDO continued to place emphasis on assistance in the commercialization of industry as well as on increasing the level of direct assistance to the private sector and the transfer of commercially-oriented management technologies and systems. A review was made of the programme's content and the type of assistance provided so as to take into account the competitive global marketplace and its realities and to provide inputs to the restructuring and privatization programmes. Emphasis was placed on profitability increase and on such issues as the strategic implications of quality in manufacturing and its effect on cost and competitiveness, the importance of software (methods, systems, work procedures, techniques), improving productivity before seeking costly hardware solutions, and the primacy of the human element in industry.

16. In Malawi, Uganda and the United Republic of Tanzania, UNIDO continued to provide assistance, primarily to agro-based and metalworking industries in productivity improvement, marketing and training (on-the-job, in-service and group

---

1/ Detailed figures for project approvals and delivery for LDCs in 1992 are provided in IDB.11/10, appendix F.

training, workshops and overseas fellowships). Technical cooperation at the enterprise level represented the core of the programme's activities. A large-scale project in Togo contributed greatly to the survival and rehabilitation of some 20 enterprises that would have been otherwise forced to close down because of the current economic crisis affecting that country.

17. With regard to maintenance and repair, major emphasis was placed on the provision of spare parts through local manufacturing and to render the local production capacity utilization more efficient. Assistance continued to be given to Angola and Madagascar in the field of industrial maintenance and spare parts manufacturing, helping small-scale industries to utilize their production equipment and their investments to the maximum extent. In the light of a privatization strategy, the marketing departments concerned had to be particularly enhanced.

B. Development and transfer of technology

18. To achieve the largest possible impact on rural and social development, projects related to agro-based industries continued to focus on the development and adaptation of technology to suit the needs of the new small- and medium-scale industry structure in line with international market demands.

19. Of particular relevance to the special needs of the African LDCs is the project on enhancement of industrial production of cheap and enriched foods in Ethiopia, Malawi and the United Republic of Tanzania funded from the Industrial Development Decade for Africa (IDDA) the short term advisory services (STAS) programme. Technology was transferred by assisting in the commissioning of a coconut cream plant in the United Republic of Tanzania that increased the domestic availability of consumer goods and the country's net export earnings. In Sudan, advice continued to be provided on equipment needed to convert a dairy plant into one for processing local raw materials for domestic and export markets.

20. In order to increase technological support to LDCs, an African information network was initiated to strengthen local capabilities in providing information services to small and medium enterprises. At the enterprise level, support was provided to LDCs in the form of participation in the UNIDO Techmart programme where direct business contacts in technology transfer were facilitated. Numerous enquiries on technology and investment related matters in various sectors of industry continue to be processed, providing advice and technological information. Encouraged by the success of the project on cassava-processing technology (Sierra Leone, Togo and Zaire) where cassava processor prototypes were installed, a third phase of the project financed jointly by the IDDA programme and the Agence de Cooperation Culturelle et Technique is under implementation. The objective is to demonstrate and promote the introduction of this technology in four selected countries, including Togo and Zaire, to assist local engineering firms in those countries in acquiring the know-how for the design, manufacture, operation and maintenance of the technology. Inspired by the outcome of that project, the technology is being proposed in other LDCs in Asia as well as in Haiti.

21. Furthermore, under the IDDA STAS programme, an expert was fielded to identify local technologies for promotion in Lesotho, while another expert made an assessment of existing technological capacities and capabilities in Zambia as part of an integrated industrial sector programme. Mechanisms for promoting local technologies, inventions and innovations in Burkina Faso were put in place by a consultant provided under the STAS programme.

22. The 1992 Africa Industrialization Day (November 20) was dedicated to the building materials industry, reflecting the high priority assigned to that sector by African Governments. The ongoing projects in Chad, Madagascar and Zaire gave priority to the creation of small-scale manufacturing enterprises, often as joint ventures with equipment suppliers, and included training programmes for the entrepreneurs and their staff, providing practical hands-on experience in the selection of raw materials, the manufacture of products and the construction of low-cost housing units using the materials produced. A significant objective of those projects has been to strive for a long-term self-sustaining process giving local building materials the prominent place in low-cost housing and institutional building they justly deserve. A demonstration plant for the quarrying and processing of marble was finished and commissioned in 1992 at Gulele, Ethiopia. The technology supplied will allow UNIDO to make a practical and effective demonstration of modern, but not overly sophisticated, production methods ensuring increased productivity, a higher yield of finished products per unit of raw material and an improved quality designed to open up larger export markets for the national marble industries in the country.

C. Environment and energy

23. The integrated industrial and environmental policy approach is being applied in a number of LDCs that requested assistance of that nature, including pollution control, as in Nepal. In Angola, following the implementation of a large-scale project in the Southern African Development Community (SADC) countries for the establishment of a regional petroleum training centre, a study was undertaken to assess the capabilities of an existing centre in the country and the possibility of its expansion to meet the needs of SADC countries in the environmental and energy sectors. The study also gives due attention to the utilization of local resources of energy as well as the development of human resources. In Sudan an economic feasibility study is being undertaken for the efficient energy use of charcoal briquettes from cotton stalk as an alternative to fuel woods.

D. Privatization

24. Some of the technical cooperation activities aimed at private sector development are described in paragraph 13 above. Through a project that was approved in mid-1993, UNIDO is also providing technical assistance to the Government of Sudan for the planning and execution of extensive privatization programmes within a programme financed by the World Bank. The UNIDO project constitutes the "core" part of that programme. Furthermore, under the System of Consultations, a regional workshop on privatization policy strategy and practice in the context of LDCs was held at Dar-es-Salaam, United Republic of Tanzania, in September 1993, for selected English-speaking LDCs, and a similar

one is to take place in November 1993 in Burkina Faso for selected French-speaking LDCs. The goal of the workshops is to enable the participants to acquire a structured knowledge of privatization policies and modalities within the framework of macroeconomic stabilization measures and to prepare a plan of action for Governments and UNIDO in terms of technical cooperation.

E. Subsector specific activities

25. Reflecting the increasingly integrated and up-front approach, UNIDO's Special Programme for the Industrial Development of Asia and the Pacific has concentrated its limited resources on the review of constraints and development cooperation activities in two major industrial subsectors in the LDCs of the region: agro-related metalworking industries and agro- and food-processing industries. Funds were mobilized to start advisory services in agro-related metalworking industries in Bangladesh, Bhutan, Cambodia, Myanmar and Western Samoa linking these countries with the established sources of technology through the Regional Network of Agricultural Machinery. In food-processing industries, a constraint analysis has been completed for each LDC in the region and a dialogue is continuing with the respective Governments on the priorities and proposed project concepts that will be elaborated and submitted to the donor community for consideration.

26. As a follow-up to the Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries, held in December 1991, and in accordance with requests made by participants, a workshop on quality and hygiene regulations in the fisheries industry was organized by UNIDO and included five participants from least developed countries. In that context, guidelines and advice were given to LDCs on the quality and hygiene standards demanded by, as well as other measures required in response to, new European Community regulations.

27. Apart from the regional activities under the Special Programme, subsector specific activities at the country level are also moving from the industry level to integrated planning, policy, support services and feasibility studies. An example of such an approach is the textiles industry subsector in Bangladesh in which UNIDO first carried out a detailed study on the potential of strengthening backward linkages with the ready-made garment industry and subsequently, after consultations with appropriate authorities and enterprises, formulated a programme with components addressing human resource development, quality control, design, investment aspects and technical troubleshooting, for joint financing between multi- and bilateral sources.

V. INTEGRATION OF WOMEN IN INDUSTRIAL DEVELOPMENT

28. An important means of achieving the fulfilment of basic development goals is by providing women with the opportunity to increase and improve their contribution to economic development. In Malawi and Nepal, the feed-forward and feedback mechanisms of the UNIDO integrated approach addressed pilot activities catering to specific target groups in priority industrial sectors. Those activities were directed exclusively towards women entrepreneurs in an effort to establish role models of successful women entrepreneurs and of viable new business opportunities. Projects targeting women highlighted the development of female entrepreneurship and the dissemination of environmentally sound technologies to benefit women. Efforts continued to be made for the development of small-scale integrated rural activities recognized as an important factor for the promotion of the private sector in developing countries, with an increasing integration of women in the production process as in the integrated women-in-development project, Shendi, Sudan, approved in 1993.

VI. OTHER ACTIVITIES

29. In addition to the activities described under the previous headings, UNIDO offered technical cooperation to a number of LDCs in establishing chambers, federations and associations of industry such as the Chamber of Commerce, Industry and Agriculture of Guinea and the National Federation of Chambers of Commerce and Industry in Nepal. Assistance to private industry associations has been given to the leather industry associations in Malawi and the United Republic of Tanzania.

30. The activities indicated above are not exhaustive. They illustrate, however, UNIDO's efforts and initiatives to implement the Industrial Action Programme for the Least Developed Countries and to comply with General Conference resolutions GC.4/Res.9 and GC.4/Res.10. In the context of these resolutions, UNIDO has published a report "Industry in the Least Developed Countries - Structure and Development" (ID/384(SPEC.)), based on the studies carried out for the workshop on the industrialization of LDCs, the Industrial Plan of Action and the Industrial Action Programme for LDCs.

VII. ACTION REQUIRED OF THE CONFERENCE

31. The General Conference may wish to take note of the present report.

Distr.
GENERAL

ID/GC.5/18
20 October 1993

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 10 (a) of the provisional agenda

THE REGIONAL DIMENSION: SECOND INDUSTRIAL DEVELOPMENT DECADE FOR AFRICA

Industry in Africa: challenge and response

Prepared by the UNIDO Secretariat

CONTENTS

		Paragraphs	Page
EXECUTIVE SUMMARY			1
Introduction		1 - 7	2
Chapter			
I.	INDUSTRIAL GROWTH IN AFRICA	8 - 24	4
II.	THE IMPACT OF CHANGES IN WORLD INDUSTRY	25 - 36	7
III.	KEY THEMES FOR AFRICA'S INDUSTRIAL DEVELOPMENT TOWARDS THE YEAR 2000	37 - 73	9
IV.	INTERNATIONAL COOPERATION - AN OUTLOOK	74 - 100	14
V.	CONCLUSION	101 - 105	21

EXECUTIVE SUMMARY

The purpose of the present paper is to set out key industrial development issues for Africa in an international context and to outline the response of UNIDO. The eleventh conference of African Ministers of Industry, held at Port Louis, Mauritius, 31 May to 3 June 1993, considered a UNIDO paper on this topic and endorsed it in its Resolution 4 (XI) on the African Common Position for the fifth session of the General Conference of UNIDO. The Director-General was also called upon to submit to the General Conference his concepts on the response of UNIDO to the industrialization problems of the African countries. The present paper, which is an elaboration of the original Mauritius paper, is submitted in response to that request.

Economic performance in Africa has not kept pace with population growth. The industrial share of the gross domestic product (GDP) has remained fairly constant over recent years, with manufacturing rising from 10.1 per cent of GDP in 1983 to 11.7 per cent in 1991. Within these aggregated figures there is considerable diversity at the country level: those with the largest industrial sector are generally dependent on exports of unprocessed or semi-processed minerals or hydrocarbons. Africa's production structure remains highly skewed.

A combination of external and internal factors, including deteriorating terms of trade, external debt, and frequently inappropriate economic policies led to economic decline in the 1980s. Policy responses have included the Lagos Plan of Action, the United Nations Programme of Action for African Economic Recovery and Development and the implementation of a number of structural adjustment programmes. The investment climate in the region is however still not attracting sufficient foreign investment.

At the same time, world industry is undergoing significant changes owing to accelerating technological change, increased investment costs and reduced product life cycles. In response, there has been reorganization of production, reorientation of government policies and strategies, and regional integration. The European Single Market, the North American Free Trade Agreement (and the moves towards an African economic community) are all examples of this. Environmental concerns are increasingly reflected in industry and trade policy. The pace of change in technology has led to a competitive production system, where a skilled and flexible workforce and nearness to markets is more important than labour costs. At present, African industry has little connection with this system, and lacks the dynamism, technological content and management skills needed to compete internationally.

V.93 89277 6248E

Distr.: 27 October 1993

Key themes for African industrial development towards the year 2000 include the following:

Privatization and private sector development

The main tasks of policy formulation will include the provision of supportive environment including macroeconomic stability and also a simplification of procedures and controls. This is especially important because the main tasks of industrialization will be the creation of new enterprises. Privatization of existing enterprises will be hampered by a lack of national entrepreneurs and technicians.

Competitiveness

Given the need for African industry to expand its mandate especially internationally, competitiveness is an important theme, calling for high efficiency, good management, and emphasis on quality, design and packaging. This in turn calls for close attention to technology choice and human resource development. The impact of industrial automation will increasingly determine the range of options available to African as well as other countries.

Small- and medium-scale industry

The advantages of small- and medium-scale industries include employment generation, import substitution, encouragement of women's entrepreneurship, rural development, and increased flexibility and resilience of the industrial sector and it is important that these benefits are not overlooked in an excessive concentration on large projects. This will call for increased capabilities to provide services for small- and medium-scale industries.

Environment and energy

Specific environmental problems in Africa relate in particular to desertification, natural resource degradation, effluent treatment and industrial pollution. There will be a need to upgrade capabilities for assessment and regulation, and to analyse the manufacturing implications of improved environmental control. Energy conservation will be essential through audits, technology development and promotion.

Financial resources

The need to mobilize additional financial resources for African industrialization is particularly important. The development of new mechanisms for financing industry through equity participation is of special significance, and the build-operate-transfer mechanisms may also offer increasing opportunities to mobilize private and international capital.

The role of subregional integration

An increasing emphasis on measures that do not require unanimity and a comprehensive approach is most likely to bring success. The recognized role of the private sector is one that the subregional organizations can encourage, both by measures that allow the sector to operate more freely across borders and through the provision of services to it. Information and the encouragement of partnerships are also important.

In the future, there will be considerable possibilities for increased development at the sectoral level, including building materials, mineral processing, agro-industries, and industries related to telecommunications, transport and communications, health and the environment. But this growth will have to take place in the face of constraints on the development of the official development assistance and limited prospects for expansion of direct foreign investment. UNIDO in turn will, in the light of the need for new priorities and improvement of its services, have to develop a new response.

At the eleventh conference of African Ministers of Industry (CAMI XI) held in Mauritius, a ten-point programme put forward by UNIDO was approved (see pages 17 to 21 of the present document). Entitled "The challenge of Africa's industrialization and the UNIDO response", the programme will be implemented within the framework of national or subregional plans and programmes. In addition, it will be based on the Director-General's proposals (GC.5/23) on priorities and structural reform of UNIDO. Paragraph 55 of that document states that "UNIDO will base its delivery of services on the industrial development strategies drawn up by individual countries" and that "the strategies will be analysed by the Organization whereafter UNIDO programmes for individual countries will be jointly defined". The ten points in the programme are:

A. Assistance in the development of appropriate strategies for industrialization in the context of market-oriented economies, and in the formulation of policies, procedures and guidelines for the enhancement of initiatives for private sector development, including in sectors of national priorities and new areas of emphasis, particularly electronics and informatics.

B. Assistance in the development of increased regional industrial cooperation in such areas as: research and development; industrial products standards; total quality management; human resource development; industrial automation; packaging and design; marketing skills; industrial management skills; industrial repair and maintenance; enterprise accounting; inventory control; and production planning.

C. Implementation of an expanded programme for entrepreneurial training and development, up to the stage of preparation of business plans and development of linkages, including with foreign enterprises.

D. Implementation of a comprehensive programme for development of small and medium industries.

E. Development of sustainable institutional capability for industrial services and support for local enterprises in cooperation with local chambers of commerce and representatives of industry groups and associations.

F. Assessment of new technological applications in sectors and branches in African countries

and dissemination of technological information and provision of training facilities and linkages for African enterprises.

G. Assessment and determination of appropriate interrelationships between environmental and ecological needs and industrial growth and priorities in African countries.

H. Dissemination of information and provision of advanced management training for local entrepreneurs in African developing countries and development of sustainable institutional facilities for this purpose.

I. Expansion of investment promotion activities and assistance in identifying and contacting potential foreign partners on a continuing basis.

J. Increased dissemination of industrial information to African countries.

Introduction

1. The purpose of the present paper is to set out key industrial development issues for Africa in an international context. The reasons for so doing are several. First, the low level of industrialization in Africa warrants special attention being given to a uniquely complex set of industrial development issues. These cover not only the problems of industrialization starting from an extremely low base, but also include the difficulties raised by strategies of industrialization in a context of special difficulties that may include one or more of the following:

- Rapid population growth;
- Uncontrolled urbanization;
- Inadequate infrastructure;
- Food shortages;
- Unfavourable climatic conditions;
- Civil strife.

2. A second major impetus for consideration of Africa's industrialization as a special case is the important changes that have taken place in political and economic terms within individual African countries, many African countries having already made the transition to multi-party democracy. All African countries are now committed to the private sector as the main engine of economic development for the future. To add to this, the movement in South Africa towards majority rule brings prospects of a new cooperative development in the Eastern and Southern African subregion and, more generally, in Africa as a whole.

3. A third set of reasons for special consideration of African industrialization reflects the changes in the world economy, that is the context in which African industrialization is taking place. Significant measures of industrial and general economic integration are taking place elsewhere: in North America, in Europe and in South-East Asia. These changes have been made in response to fundamental shifts in technology and their effect on the production system. African industry, if it is to grow and meet the expectations of its people, must become part of the world industrial system in order to achieve the necessary dynamism, efficiency, and long-term growth prospects.

4. This last consideration also indicates the need to keep under review the goals and implementation of the Industrial Development Decades for Africa (IDDA). The Second Decade has built upon the achievements of the first in that the priorities have been defined at the national and the subregional levels, but there is, owing to the accelerated pace of the change in the world economy, an ever more pressing need to review continuously the industrialization process in a wider international context. Again the emphasis on priorities (including at the level of individual projects) that characterizes the IDDA programme has to be tempered by the commitment made to the private sector as the main engine of growth. This means that it is private enterprises that will ultimately determine what priorities are actually followed. But it is a requirement of Government, and of international support to that end, that an enabling environment be created to sustain and encourage the individual industrial enterprises. It is for that reason that re-examination of priorities in an international context is necessary to determine what changes are needed in that support.

5. The fifth session of the General Conference takes place at a critical moment in UNIDO's history in which the role and purpose of the Organization are being closely examined with a view to determining how best it can contribute to the growth of developing countries in a changing world. At a broad level, Africa's industry faces not only indigenous difficulties but those created in the world economy by the ever accelerating pace of technological change and the consequent transformations of production. It is therefore all the more necessary that international support to industry in Africa be as timely and as targeted as possible.

6. The eleventh conference of African Ministers of Industry (CAMI) held at Port Louis, Mauritius, 31 May to 3 June 1993, considered the UNIDO paper "The challenge of African industrialization and the UNIDO response" in which the above questions were analysed and a ten-point programme of responses was proposed, which was endorsed by the Ministers in the common position adopted for the fifth session of the General Conference of UNIDO. 1/ The UNIDO document was also endorsed in a resolution on the statement of the Director-General of UNIDO. 2/ Further, most of the key themes for African industrialization identified in that document are also found reflected in the Mauritius Declaration on Africa's Accelerated Industrial Recovery and Development, in the context of the Second Development Decade for Africa (1993-2002) and beyond. 3/ The

---

1/ See CAMI.11/13, annex IV, resolution 4 (XI).

2/ Ibid., annex V, resolution 5 (XI).

3/ Ibid., annex VII.

eleventh CAMI also called on the Director-General of UNIDO to submit to the fifth session of the General Conference his concept of how the Organization should respond to the industrialization problem of the African countries, taking into account the changes in the global economy.

7. The present document is intended to contribute to the analysis of some of those questions. It is organized as follows: chapter I describes industrialization in retrospect, attempting to summarize the achievements and the present weaknesses. Chapter II analyses the impact of emerging global trends on Africa's industrial development in the years to come. Chapter III examines the response needed to the difficulties prevailing and the challenges that are emerging. Chapter IV, in conclusion, reviews associated questions of international cooperation, and attempts to say what needs to be done by all those involved to improve support to industry in Africa to help it play a wider role and contribute to overall development.

I. INDUSTRIAL GROWTH IN AFRICA

A. General economic performance

8. The past five years have seen a continued decline in the economic performance of the region (excluding South Africa), as real gross domestic product (GDP) growth contracted from 4.8 per cent in 1988 to 1.9 per cent in 1992, admittedly an exceptionally bad year in which Southern Africa was hit by severe drought. At the same time, population growth in the region maintained a steady expansion rate of 3.0 per cent a year.

9. At the subregional level trends have been very uneven, with the countries of the 11-member Economic Community of Central African States (ECCAS) recording negative growth rates throughout the five year period (annual average of -1.9 per cent, with -2.5. per cent in 1992), the 16-member Economic Community of West African States (ECOWAS) showing positive but slowing real growth (average of 5.6 per cent, with 3.4 per cent in 1992), the five Maghreb countries also producing real growth, averaging 2.8 per cent, but only 1.6 per cent in 1992, and the 15-member 4/ group of countries of the Preferential Trade Area for Eastern and Southern African States (PTA) recording average real growth of 2.3 per cent with an exceptional year of negative growth (mainly attributable to the drought) of -0.14 per cent in 1992. Grouping all countries in the region into just two categories - net oil exporters and net oil importers - the exporters recorded average real growth of 4.0 per cent a year and the importers 1.9 per cent.

10. At the sectoral level, services accounted for 45.1 per cent of the region's total GDP in 1991, compared with 32.1 per cent from industry (of which manufacturing accounted for 11.7 per cent) and 22.8 per cent from agriculture. This sectoral breakdown of GDP has remained fairly constant over the last 10 years. In 1983, services contributed 42.4 per cent against 34.1 per cent from industry (manufacturing 10.1 per cent) and 23.5 per cent from agriculture, and the respective shares in 1987 were 46.1 per cent for services, 30.9 per cent for industry (11.3 per cent for manufacturing) and 23 per cent for agriculture.

11. In terms of contribution to growth, services made the largest contribution to expansion in total GDP over the five-year period 1988-1992, accounting for 45 per cent of total, with agriculture accounting for 24 per cent and industry 31 per cent of growth (see table 2). Industry accounted for 0.7 percentage points of total GDP growth in 1992 of 2.0 per cent and, within this share, manufacturing accounted for 0.3 percentage points.

B. Industrial performance and structure

12. Behind this aggregation of statistics from 51 African countries, there lies a tremendous diversity within the national industrial sectors. Analysis at the country level reveals that those countries with the largest industrial sectors are, in fact, countries generally dependent on exports of unprocessed or semi-processed minerals or hydrocarbons. Hence, in 1991, industry accounted for 46.1 per cent of GDP in Angola (petroleum), 54.5 per cent in Botswana (diamonds), 54.3 per cent in Gabon (petroleum), 45.4 per cent in Nigeria (petroleum) and 46.9 per cent in Zambia (copper). African countries with the smallest industrial sectors were Comoros (10.5 per cent), Gambia (11.2 per cent), Somalia (8.8 per cent), Uganda (11.7 per cent) and the United Republic of Tanzania (10.3 per cent).

13. Looking at the manufacturing subsector, Zambia predominates, but again displays its overdependence on one basic commodity with manufacturing - mainly in the form of copper refining - accounting for 36.1 per cent of GDP. After Zambia comes Zimbabwe, which has one of the most diversified manufacturing sectors in the region, contributing 27.4 per cent of GDP, Mauritius with 23.2 per cent (up from 15.8 per cent in 1983 mainly as a result of its highly successful export processing zones), Swaziland with 20.9 per cent (more than half of MVA comes from sugar refining and a further quarter from pulp and paper), and Côte d'Ivoire, where manufacturing accounted for 18.1 per cent of GDP in 1991 and is based on a fairly well diversified range of activities, developed primarily by investing the proceeds from cocoa and coffee exports in the immediate post-independence period when world prices were high.

14. Yet in most of the region manufacturing accounted for less than 10 per cent of GDP in 1992, with the smallest sectors found in Equatorial Guinea (2.3 per cent), Comoros (3.8 per cent) and, in marked contrast to the size of their respective industries, Gabon (4.0 per cent) and Botswana (4.3 per cent).

15. The historical trend shows a slowing down in growth rates of manufacturing value added (MVA),

---

4/ This is the categorization used by the African Development Bank (ADB). It should be noted, however, that there are now 19 members of PTA, and that data on Angola, Mozambique, Namibia and Sudan are not included in the ADB definition. Similarly, some countries belong to more than one regional organization, e.g. Burundi, to both ECCAS and PTA (see footnotes to table 1 for further details).

Table 1

Real GDP growth by subregion (at constant 1985 market prices)
1988-1992

(annual percentage changes)

Subregion	1988	1989	1990	1991 a/	1992 b/	Average 1988-1992
RMCS	4.8	4.2	3.4	2.6	1.9	3.4
ECCAS	-1.4	-0.7	-2.0	-2.7	-2.5	-1.9
ECOWAS	8.2	5.7	6.7	4.1	3.4	5.6
MAGHREB	2.4	3.8	2.7	3.2	1.6	2.7
PTA	5.1	3.5	2.3	1.1	-0.4	2.3
NET OIL EXPORTERS	4.8	4.8	4.6	3.3	2.7	4.0
NET OIL IMPORTERS	4.7	2.9	0.9	1.1	0.0	1.9

Source: African Development Report 1993, African Development Bank.

Notes: a/ Provisional estimates.

b/ Preliminary estimates.

Africa: Regional member countries (RMCs) of the African Development Bank.

ECCAS: Economic Community of Central African States (Burundi, Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon, Rwanda, Sao Tome and Principe, and Zaire).

ECOWAS: Economic Community of West African States (Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo).

Maghreb: Algeria, Libyan Arab Jamahiriya, Mauritania, Morocco, and Tunisia.

PTA. Preferential Trade Area for Eastern and Southern African States (Burundi, Comoros, Djibouti, Ethiopia, Kenya, Lesotho, Malawi, Mauritius, Rwanda, Somalia, Swaziland, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe).

Net oil exporters: Algeria, Angola, Cameroon, Congo, Egypt, Gabon, Libyan Arab Jamahiriya, Nigeria and Tunisia.

Net oil importers: All countries excluding the net oil exporters, as defined above.

Table 2

Sectoral contribution to GDP growth, 1988-1992

(in per cent)

	1988	1989	1990	1991 a/	1992 b/
Agriculture	1.5	1.1	0.2	1.2	0.2
Industry	1.0	0.9	1.8	0.7	0.7
Mining	-0.4	0.4	0.4	0.5	...
Manufacturing	0.5	-0.1	0.5	0.3	0.3
Services, etc.	2.2	2.3	1.4	0.8	1.1
GDP at 1980 factor cost	4.7	4.3	3.5	2.7	2.0

Source: ADB estimates.

Notes: a/ Provisional.

b/ Preliminary estimates.

which averaged 6 per cent a year for the region as a whole during the 1970s but fell to an average of 4.1 per cent a year in the 1980s. One explanation behind this phenomenon is the wide-scale introduction of import-substitution policies in the industrial sector in the years immediately following independence. So long as world prices for the primary commodities that form the majority of the exports of the region remained relatively high, investment - mostly by Government - in industry was possible and laid the basis for these import-substitute manufacturing activities. As economic recession spread throughout the region in the 1980s, the weaknesses of this policy were underlined, investment flows dried up and the purchasing power of domestic consumers fell, with a resultant contraction in industrial output.

16. None the less, the growth rates appear fairly good when compared with those of world industry as a whole or with those of developing countries as a whole. Yet they give altogether too optimistic a view of industry in Africa. Relatively good growth rates mean very little when the industrial base is so small. The African share of world MVA in 1975 was a meagre 1 per cent and, nearly 20 years later, it is still some 1 per cent.

17. The range of manufacturing activities has also displayed a lack of dynamism in the post-independence period. Where transformation of natural resources does take place, this rarely goes beyond the semi-processing stage. Where manufacturing is aimed at the domestic market, the traditional sectors of brewing and tobacco still predominate, followed by textiles which, in many cases, do not even originate from home-grown cotton. Ventures into heavy industry have, in a large number of cases, resulted in a stream of costly but unsuccessful projects and the manufacture of capital goods and equipment is minimal.

18. Hence, the production structure in Africa remains highly skewed, and is concentrated in either semi-processing of export commodities or branches that are closest to final demand in the domestic market. The largest industrial branch in world industry in value terms is non-electrical machinery, followed by transport equipment, electrical machinery and food products. In Africa, the three largest industrial branches are food products, textiles and other non-metallic minerals. Most striking is the absence of machinery, which indicates not only that the creative forces involved in technological terms in this industry do not act as an agent of change in African industry but also that African countries are highly dependent on imports not only of capital goods but also a wide range of consumer goods.

C. Factors affecting industrial development in the region

Economic reforms and policy approaches

19. The 1980s saw one African country after another fall into economic decline under the combined impact of both exogenous and endogenous factors - steadily deteriorating terms of trade as world market prices for primary commodities from Africa collapsed, the growing realization that the enormous volume of external debt contracted in the second half of the 1970s and early 1980s was beyond the borrowers' servicing capacity, failure on the part of Governments to invest in maintaining already inadequate infrastructure, or in providing sufficient education and training facilities, and the application of frequently inappropriate economic policies, such as overvalued exchange rates, overtaxation of exports, and inefficient state marketing of agricultural produce.

20. However, it was the Africans themselves who, at the beginning of the 1980s, took a major initiative to collectively review the development process and design an action plan for growth and economic development. That plan, the Lagos Plan of Action, was soon followed by the World Bank's Action Programme for Sustained Development in Sub-Saharan Africa (1984). The African Priority Programme for Economic Recovery was approved by the Heads of State and Government of the Organization of African Unity (OAU) in 1985 and in 1986 the United Nations Programme of Action for African Economic Recovery and Development (UNPAAERD), 1986-1990 was adopted by the United Nations General Assembly. In 1989 the World Bank issued its Long-Term Perspective Study on Sub-Saharan Africa - from Crisis to Sustainable Growth, which gave further orientation to the policies to be pursued. Given the fact that substantial parts of those programmes were implemented, the efforts of the African countries should be commended. For instance, by early 1993, no fewer than 28 countries of the region had structural adjustment programmes in place.

21. Another issue of crucial importance to the 14 African members of the Franc Zone* is exchange rate policy. That membership of the Zone has brought many positive benefits, such as free convertibility of the currency, monetary discipline and a common currency in two large subregional economic blocs (the Union monétaire ouest-africaine and the Union douanière et économique de l'Afrique centrale) is undeniable but some opinion suggests now that the franc CFA (Communauté Financière Africaine), which has been maintained at a fixed parity with the French franc since 1948, has become increasingly overvalued. Internally, this would imply that even when a manufacturer is operating at optimal efficiency, he could not compete with imported products, added to which many countries have the handicap of a small domestic market, and can barely dream of trying to export manufactured products anywhere other than within the Franc Zone region. Yet domestic industry in Franc Zone countries is expected to compete with contiguous States outside the Zone that have devalued consistently under structural adjustment programmes, and this in an era of liberalizing trade policy where any form of protection for the domestic producer is unthinkable.

The investment climate

22. In an era of economic liberalization, tenders for the purchase of public enterprises are perforce open to both national and foreign bidders. But

---

* The member States of the Franc Zone are: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Mali, Niger, Senegal, Togo.

confidence in the economic prospects of the region is being shown only by two distinct groups of foreign investors - those from former colonial powers who are familiar with the region and see a natural opportunity to stem the attrition of long-entrenched interests and a small band of entrepreneurs with no track record but who are prepared to take high risks. There is also cause for concern over the evaluation of those state-owned assets slated for privatization, as has been seen all too clearly in Eastern Europe.

23. Yet unlike Latin America or China, for example, there is little indication of a major upturn in foreign direct investment into the region. Firstly, the lack of capital markets in the region limits access for the investor to secondary markets should he wish to divest himself of his holding or even wish to expand into other ventures. Secondly, until nationals of the region themselves display confidence in investing locally, it is unrealistic to expect shows of confidence from bona fide foreign investors.

24. Direct foreign investment in Africa is particularly low for a number of reasons. Firstly, investment costs are high; the lack of a suitable physical infrastructure may often require additional expenses, and construction costs and the fact that high transport cost will probably have to be paid for the equipment also contribute to this. Secondly, operating costs are high. There is a shortage of skilled labour, and although Structural Adjustment Programmes are contributing to a simplified system of controls, there are still bureaucratic delays in many processes associated with the operation of a manufacturing firm such as permits, licences, foreign exchange allocations and the like. Incomes in African countries are low and domestic markets are therefore small. However, the location of many African countries, far from more developed markets, means that transport costs and thus final prices will be higher than if the factory had been located in another part of the world. In many cases productivity is also low, owing to inadequate skills of the labour force and insufficient attention to industrial training.

II. THE IMPACT OF CHANGES IN WORLD INDUSTRY

25. Three main factors can be identified at work in world industry that are determining its shape and structure and the response of Governments and private enterprises. The first factor is accelerating technological change. This means that the pace of change is increasing, spurred on by competition which itself is increasing, owing to information availability, increased openness of international trade and globalization of financial markets. Accelerating technology change is devaluing old resources and creating new ones, and it affects both products and processes.

26. A second characteristic factor at work at present in world industry is increased investment costs. The new technologies are more flexible, more powerful, more attractive and more competitive, they provide a better possibility of winning on world markets and they minimize the diseconomies in environmental terms but they cost more.

27. The third factor at work is reduced product life cycles, which means that the time for a product to become obsolete is growing shorter and shorter. This factor, combined with increased investment costs, means that, increasingly, management decisions become bigger and are taken under more and more pressure. Investment decisions are no longer something that can be deliberated over for several years. An attractive opportunity must be seized as soon as it is identified, otherwise delays will render invalid the conclusions of the feasibility study concerned. In general, technological change is a continuous series of developments. There are few resting-places on the road to progress.

28. In general there have been three main responses. The first is reorganization of production, which means that, at the level of the enterprise, the decision has been taken to reorganize the various stages of the production process from design to production to marketing. Companies are increasingly ready to:

(a) Redistribute geographically the production stages, so different components of the final product can be made in different parts of the world;

(b) Devolve or hand over responsibility for production or industrial services, so that some parts of production will be subcontracted to other firms;

(c) Improve speed and process of communications.

29. A second major response is a reorientation by the Governments. The general role of the State as an economic agent has been fundamentally re-thought in most parts of the world. However, the specific role of Government with respect to the industrial sector has also been examined with rather different conclusions from those arrived at for the economy as a whole. Manufacturing has always been seen as a key sector, as the most dynamic and the most technologically oriented and as the one with the best prospects for sustaining economic growth in the future.

30. A further new component of industrial policy issues is that of the environment. The growing concern among both developed and developing countries with respect to environmental issues is changing fundamentally the economic foundations of industrial production and, increasingly, Governments are changing the rules of the game on the operation and the location of industry. Consumers (i.e. voters) are in many respects in advance of Governments in their thinking and it may be expected that further policy changes and regulatory developments will take place. The convergence of trade and industry policies is thus being compounded by the addition of enviornmental policy. This convergence, in turn, is creating pressures against unfair competition, and it can be expected that any attempt by countries to outbid one another for foreign investment in terms of how tolerant they will be of environmental degradation will not succeed. Even if they were unwise enough to pursue such a short-term view this would be characterized as unfair competition and products of such factories would face punitive duties once they were exported to other parts of the world.

31. The significance of government action is likely to continue but it will take new forms: there will be a new emphasis on providing facilities and support. There is a new emphasis

on providing a stable operating environment for industry both by simplifying the administrative framework, by emphasizing technical standards as a basic reference point for industrial development and technological innovation and by a continued encouragement of financial markets, mobilizing funds through the liberalization of exchange rates, capital movements and regulatory frameworks, thus allowing free range to the creation of financial instruments appropriate to the specific needs of individual firms. Similarly, Governments are placing renewed emphasis on the development of human resources to provide not only the specific skills needed by particular branches of industry (such as in electronics, informatics, and biological sciences), but also emphasizing business skills and strategic analysis capabilities to provide management resources, to stimulate entrepreneurship, and to provide the flexibility and imaginative approaches needed to respond to the problems of accelerating changes. The internationalization of industry, already referred to, has found a response in the emphasis in public policy on providing improved communications, both in terms of transport facilities and telecommunication infrastructures. In many cases liberalization has been pursued in these fields also, which has provided a further stimulus to their development. Governments have also played an increasing role as representatives of their own industries in trade negotiation, which has had a significant manufacturing content. The role of technical standards has also become a concern of high-level government policy, given its links to the internationalization of production and its potential for encouraging or limiting competition.

32. Another response to the challenges of technological change, decreasing product life cycles and increasing investment costs, has been the movement towards regional integration. Economic cooperation between groups of countries has always existed as an objective. Now, however, the regional economic integration process is receiving an important new impetus from those accelerating forces of technological change already referred to. In particular the demonstration effect of the Single European Market may have encouraged not only the formation of the North American Free Trade Agreement (NAFTA) but also the renewed emphasis within the Association of South-East Asian Nations (ASEAN) on tariff reduction. Cooperation has become not so much a question of banding together in order to ensure more efficient pursuit of long-term development goals but rather banding together to try to ensure survival against what is seen as strong competition in other parts of the world. Moves by African Governments towards the creation of an African Economic Community have been brought about not only by a sense of frustration with what has been so far achieved but also a determination that in the growing internationalization of world industry, in which the stage may be dominated by major economic powers, Africa must not be left behind. Thus the goal exists of an African Economic Community by the year 2025, and the major sub-regional integration efforts in Africa are steps to this end.

33. The growing international trend towards mergers and alliances is partly a consequence of measures such as the Single European Market but, more importantly, it is a reflection of competitive pressures. The pace of change and the requirements of competitiveness, especially in terms of contact with markets, technological development, logistics and business services, are such that in many fields only larger companies can survive. There is a need, especially in high technology industry such as computers and electronics for companies to minimize the risks of technological development by what in effect are anticipated market-sharing agreements. Technological development takes place in consortiums or with specific strategic alliances between firms that in other respects would be rivals. The formation of strategic alliances is also encouraged by the need to have a wide range of skills and experience of different markets, in order to have the flexibility needed to deal with change. A complex and rapidly changing system of production has developed in world industry with a continuous reallocation of resources, labour content, and a high level of skills among those engaged. It is a production system that evaluates its input structure rigorously and frequently. Flexibility in the workforce, a high degree of skills and nearness to markets are more important than labour costs.

34. It is clear that African industry has little, if any, connection with this system. There are of course important exceptions. Some African countries have relatively sophisticated manufacturing sectors where a few companies have indeed managed to create their own links. Other countries have sometimes an active foreign-owned industrial sector that can be considered as part of a wider system but, in general, the industrial scene in African countries is characterized by enterprises which, for a number of reasons, lack the dynamism and technological content of modern industrial companies in the developed world and in more advanced developing regions.

35. African industry in general does not have research and development (R and D) capacities nor adequate maintenance capacities and for this and other reasons, capacity underutilization is a characteristic of industry in Africa. Capacity underutilization derives from a wide range of causes. These include lack of maintenance skills, shortage of spare parts and equipment (often due to lack of foreign exchange), shortage of raw materials and inadequate power supplies. However, another cause of capacity underutilization is a lack of demand for the products, and very often this lack of demand owes to the fact that demand was inadequately estimated in the first place. Many examples can be found of over-capacity in structural terms, in which factories were built with the most optimistic expectations as to possibilities for selling the products.

36. The question of industrial management skills is perhaps the most pervasive single problem in African industry. Attention has, rightly, often focused on the weakness of African industry in terms of its technical skills, and in specific areas of technology such as industrial maintenance and engineering resources. However, general management skills are the most crucial of all: the ability to summarize a situation, to make decisions, to allocate priorities, to collect and interpret quantitative information in a way that allows the enterprise to make the right decisions - these are all skills that need both solid educational attainments and specific training in industrial management skills. The occasional

self-taught and successful entrepreneur does not disprove this point. For every one of these there are many enterprises that are inexorably declining because their managers can neither analyse their strengths and weaknesses nor take necessary action in response.

III. KEY THEMES FOR AFRICA'S INDUSTRIAL DEVELOPMENT TOWARDS THE YEAR 2000

A. Privatization and private sector development

37. Private sector development as noted, has been espoused by most African Governments as the principal means by which industrialization, and overall economic growth, will take place. It is clear, however, that one of the main tasks of policy formulation in the immediate future will be the articulation of private sector development policies, especially in the field of industry. Such policies will have three main components:

(a) A supportive environment;

(b) A system of industrial services;

(c) Strategic intervention as appropriate.

38. A supportive environment means more than a desirable stability in macroeconomic variables. Certainly, low inflation, low interest rates, a realistic and stable exchange rate and similar considerations are necessary conditions for industry to grow, but a number of other elements will also be required. The question of information availability has already been referred to, not only for access to technological information, but also to make available market information and news about potential new products and sources of raw materials. The Government has an important duty to ensure as free a flow of information as possible. In addition, there is a basic requirement to liberalize economic activity in general; this means a reduction in bureaucratic controls on enterprises and the release of creative energies. With the help of structural adjustment programmes, considerable progress has been made in the achievement of stability in the main macroeconomic variables. Privatization has proceeded in many countries and for this reason the industrial sector has achieved an important precondition for its future progress.

39. It must be recognized, however, that the number of industrial enterprises in Africa at present is very small. The main tasks of industrialization will be the creation of new enterprises, rather than the privatization or the rehabilitation of existing ones. Creating new enterprises is necessary because numbers are so small that in many cases a critical mass of industries, one that could grow into a self-sustaining complex of supportive industries in different branches, does not exist. Therefore the preconditions for dynamic growth are absent. It is also clear that among the factors deterring new entrants will be bureaucratic obstacles to setting up manufacturing activities. These involve not only the necessary licences and permits to be obtained but also a considerable amount of regulatory control on the hiring and firing of staff as well as control of wage levels. To this must be added the special problems of import and export. Manufacturing in Africa will be more dependent on the import of raw materials, capital goods, and spare parts than in other parts of the world. Foreign exchange shortages and currency control and allocation systems will bear more heavily on the manufacturing sector than on other economic activities that take place in the country. Time-consuming processes, even if the end result is favourable, means that the time of the entrepreneur is spent in unproductive activities; instead of concentrating on the manufacturing process and how it can profitably be undertaken and carried out, energies have rather been channelled in the often frustrating task of obtaining permission for one operation or another.

40. A trend of particular relevance to the industrial sector is the wide-ranging promotion of privatization, particularly so as most of the large-scale industrial projects in Africa have tended to be wholly or partly State-owned. The performance of many such industrial enterprises is ample testimony to poor management practices and, frequently, inappropriate choice of products in the first place. Clearly, some form of rehabilitation is necessary but there is room for reflection as to whether it was the mere fact of public ownership of these enterprises that condemned them to failure or merely poor investment decisions and inefficient management, independent of the ownership issue. In practice, privatization programmes in the region - as currently conceived - are proving painfully slow to implement and are encountering numerous obstacles.

41. In many countries there is a dearth of national entrepreneurs and technicians to take over and to manage these state-owned concerns, although there is a wealth of entrepreneurship and technical expertise among nationals living outside the region. Similarly, although there may appear to be a lack of investment funds for privatization, there are massive amounts of flight capital invested outside the region. Moreover, as privatization is being carried through in a liberal economic environment, no distinction is drawn between local and foreign investors. Consequently, widescale foreign ownership of industry in the region is the likely outcome of these programmes, bringing with it the risk that profits will be repatriated and not re-invested within the region itself.

B. Competitiveness

42. Competitiveness is the ability of an enterprise, a sector, or a country to hold or increase a share of the market. For an enterprise, the market may be a combination of the domestic and the international market. For a country, the same may be true: worries about competitiveness often focus as much upon the share of imports in the country concerned as upon its share of world trade. Competitiveness is important because the share of the market may be an important determinant of the profitability of an enterprise. For a country, national competitiveness may be an important determinant of income levels and of growth prospects for the future.

43. Enterprise strategies to increase competitiveness have several components. Competitiveness may be enhanced through a combination of the following:

(a) Price reduction;

(b) Product design;

(c) Quality improvement;

(d) Improved marketing;

(e) Improved distribution;

(f) Innovation.

44. Similarly industrial policies to improve competitiveness have several components. They include combinations of the following:

(a) Trade regulations;

(b) Technology policies;

(c) Human resource development programmes;

(d) R and D programmes;

(e) Industrial standards;

(f) Institutional development;

(g) Export promotion;

(h) Investment incentives;

(i) Development financing institution promotion.

45. In view of the growing integration of the world economy, and the need for developing countries to expand their markets, competitiveness is becoming an important theme. Given the small size of many African markets, the need to increase exports has been an important determinant of industrial policy. Much attention has rightly been paid to the possibilities offered by regional integration schemes as a means of expanding the market for industrial products. However, the share of intraregional trade in the total trade of most countries remains small. Moreover, in many cases, production structures are similar and the opportunities for exchange of products, particularly manufactures, are limited for this reason. A focus on world markets will, of necessity, be an increasing component of industrial strategies.

46. Elements of this focus will include the following: appreciation of trends in world industry, identification of market niches, and increasing the competitiveness of domestic industry in order to make it ready to export successfully to world markets. Increasing competitiveness has several implications. It means not only a high degree of efficiency and good management in conventional terms. It must also include an enhanced emphasis on quality, on design, on packaging, etc. This, in turn, calls for close attention to technology choice and to human resource development. The growing internationalization of product standards, and the spread of quality standards, especially ISO 9000, indicates the degree to which competitiveness has found practical expression in the strategies of companies in developed countries and in many developing countries.

47. Development of the necessary institutional support in Africa will take time, and it cannot be expected that all enterprises can immediately be turned towards an export-oriented strategy in which products and processes are competitive with the best international practice. For this reason, as a significant means of quality upgrading as well as of technology acquisition, particular attention may be directed towards the formation of partnerships between enterprises in developed and developing countries. In some cases, straightforward subcontracting arrangements can provide significant benefits by allowing African enterprises access to the latest trends in consumer demand and assistance in meeting the particular standards or regulations applied to the goods in question. The developed country partner, in turn, has the assurance of the availability of products at competitive prices and can accordingly expand its market without necessarily expanding production facilities directly.

48. The second major component of private sector development strategies will be the provision of appropriate support services. This is a job not only for the government but also for the private sector itself, especially by chambers of commerce and chambers of industry providing centralized support services - such as in marketing - in sourcing of raw materials, in training, in giving information on technological options and investment promotion activity. The provision of management training, as already indicated in chapter II (para. 36), will be of crucial importance. Government involvement is important in assisting such activities to get off the ground, but it does not have to be national Government; local Government can also help in providing such services and this kind of intervention will stimulate regional industrial development in a practical way. The need to diffuse industrial capacity through a country in order both to combat urbanization and to bring improved living standards to more disadvantaged areas is an issue that will be increasingly important in many African countries in the years to come. Some have already taken steps to encourage industrial development at an autonomous regional level. The provision of services, or at least involvement in the provision of them, is a practical means by which a local Government can encourage industrialization of its own region.

49. National support in the provision of services for industry will obviously be of most value in such areas as research and development, developing and adopting technologies to local requirements, and also in helping local industry to meet international standards. This is not only in the former sense of ensuring conformity with international product standards but also in encouraging the diffusion of total quality management methods and also improving packaging and design. The third area of private sector development will be that of a strategic intervention where necessary, in order to give an impetus to industrial growth. This could be especially useful in the areas of encouraging direct foreign investment.

50. The issue of technological development will continue to be crucial for African countries, but it will be essential to have a more action-oriented approach to this question. Attention to the technological issue in the past has concentrated too much upon the rhetoric of technological development, with not enough attention to the details by which technological development is to

be achieved. With a new emphasis on the private sector, considerable attention will have to be placed upon encouraging that private sector itself to take the main lead in technological development, in the articulation of policy, and in the adaptation of imported technology to suit local needs.

51. There is, however, a fundamental change in the question of technology choice, that is a result of the diffusion of automation that will restrict the range of options available for the future. The range of possibilities for technologies is being reduced in spite of the increased flexibility afforded by automation itself. Thus the traditional dilemmas between labour- and capital-intensive technologies have in a sense been superseded. The only technology that can rationally now be chosen, especially if any notion of international competitiveness is to be maintained, is the most competitive technology. For many products, labour-intensive technology will not be competitive on world markets. Thus ideas are often unrealistic that job creation should be the focus of technological choice. What is needed is customer creation, and it is from this that employment generation will follow. But customers will only be found if the product is of good quality, is at an attractive price and readily available, whether domestic or international markets are under consideration.

52. The advent of the computer, and information technology in general, has created a radical transformation of production possibilities that has provided the opportunity to integrate manufacturing processes in a way no earlier technologies have offered. The ability to link the whole process of a company's activities from design through materials processing, manufacture, packaging and transfer, has increased dramatically.

53. Technology policy will be crucial for a correct response, and it will find expression in many areas. The necessary country policies will include the development of education and skills, the provision of consultancy services for small to medium-sized enterprises, and help with marketing and work organization changes. In more detail, this will mean:

(a) Support for the provision of information and advisory services regarding specific technologies;

(b) Support for consultancy services and feasibility studies regarding appropriate technologies;

(c) Support for the purchase of - at the least - demonstration sites where those technologies can be seen in action, and people can gain hands-on experience;

(d) Provision, as far as possible, for a long-term programme of support in order to reduce uncertainty, though not to create dependency;

(e) Encouragement of inter-firm collaboration both in an engineering sense and in a modern buyer/supplier sense. In addition to this, help creating stronger links between educational and technology research institutes, and the bodies they are intended to serve, i.e. manufacturing industry;

(f) Assistance in organizational adaptation. Management expertise is often weak and based on traditional structures. The whole system of managerial control and organizational structures needs to be modernized by less hierarchical or functional activities; and by the adoption of just-in-time technology, total quality management, etc.;

(g) Greater concentration on education, skills and training at all levels. There is clear evidence from the experiences of the developed countries that this has proven to be the starting point for a "virtuous circle of success" in a development context.

54. In most African countries no clear priorities have been developed for technology. There is a need to reorganize a variety of public technology policy institutions. They should be dealing with tasks more relevant to the local economic and technological development and this should be done in more intense cooperation with individual firms and other economic actors. This implies more cooperation between universities, research institutes and firms. There is a specific need to spread information on the use and possibilities of new technologies. This could be done through, for example, establishing specific "information technology centres" with differing targets, e.g., computer-aided design centres. There are many possible alternative forms to organize such centres, but it is important that they are in close contact and cooperation with educational and training institutes as well as with firms. This kind of information technology centre has proved to be rather successful in developed countries. Other necessary measures include the following:

(a) Companies need direct assistance in getting information on production technology developments and making technology acquisition decisions. This could be arranged, for example, through sectoral research institutes, branch organizations or parastatal holding companies employing personnel specialized in information gathering, and creating contacts with sources of technological information abroad. The specialists should carry out contract tasks for individual firms to help create contacts with technology suppliers and technology contract issues;

(b) Similar aid is needed by firms in technology assimilation and adoption matters. In this case, however, the need is for highly specialized knowledge on production technologies and for long-term support that starts before the actual implementation of new technologies and continues until the new systems have been totally incorporated into the everyday activities of the firm. This kind of aid may, in many African cases, be only available through foreign donors;

(c) More general awareness programmes are needed on the effects and possibilities of technological development. They should be associated with an open and wide social discussion on the themes of technological development;

(d) Companies also need more direct financial aid in technology acquisition. This means facilitating the regulation of foreign currency in production technology matters. New production technologies are, however, a means to make the economy more effective and productive and thus

create new possibilities for economic growth and increased exports. The need to make customs procedures less complicated and less bureaucratic is as important;

(e) For capability building it is important that local firms are deeply involved in every technology transfer case, even when foreign donors are completely responsible for the process. Technologies imported should be appropriate in at least three senses: they should fit the existing production processes in the recipient organization, they should raise the technological level of the organization and serve as a basis for capability building, learning and further technological development, and, third, they should support the macro-level national development targets. The last topic may often include, for example, the target of diminishing the variety of machine types and makes in the country.

55. But automation is not the only issue in technology; in other respects, the range of possibilities has increased enormously, especially owing to the prospects opened by biotechnology, the possibilities of new materials, and the changes in the economics of technologies brought about by energy and environmental concerns. There will still be plenty of scope for the invention, development and application in Africa of new ways to make new things. These can result from the use of local raw materials or the adaptation of technology so as to minimize the use of imported materials. Another range of such possibilities is opened up by the need to cater for peculiarities of the domestic market, for which products developed elsewhere are inappropriate.

56. An important question, however, is the effect of technological change on the participation of women in industrial development. The evidence suggests that development and technological change both displace and provide additional employment for women. In sub-Saharan Africa, women have been displaced in traditional beer brewing by imported lager beer and cheaper, imported soap has taken over markets from women who produced soap from palm oil and wood ashes. On the other hand, the export-processing zone in Mauritius provided additional employment for 22,000 workers of which 80 per cent were women. However, the Mauritius example is not widespread in Africa. In general, capital-intensive and high technology production requiring industrial skills and experience has tended to exclude women on cultural and education/training grounds.

C. Small- and medium-scale industry

57. The traditional mode of industrial development adopted in Africa was to concentrate on large-scale industries. A new emphasis on the private sector, to the extent that it also includes a more open and encouraging attitude to direct foreign investment, may be in danger of continuing this emphasis unduly. Certainly large projects are not undesirable, but small and medium industries have several important characteristics that make them particularly suitable for consideration in the African context and which are in danger of being neglected. The advantages of small and medium industries include employment generation, import substitution, encouragement of women's entrepreneurship, development of rural areas, and arresting urbanization, the imparting of increased flexibility to the industrial structure and the imparting of increased resilience to the industrial sector as a whole. Small industry tends to be neglected by policy makers because it involves too many people to deal with individually and often includes the informal sector where contacts with officialdom are avoided. Any one firm will have such a small scale of operation that it is not seen as making a great impact on the economy. As a whole, the small enterprise exhibits in an accentuated form many of the shortcomings of African industry as a whole. The number of functions attached to the manager of the company will be even more than in a larger company. In fact its success may be wholly dependent on one person who has even less time to visit advisory centres or to seek expertise in particular areas. For this reason the appropriate policy response will have to be directed increasingly towards a more positive seeking out of small entrepreneurs to diagnose their problems and to give them appropriate support rather than the setting up of advisory centres of the traditional kind, because small entrepreneurs will be too busy to ever visit them.

58. The policy implications of such a strategy are that a coordinated approach is needed at the national and local level. The specific task of bringing advisory services to small industries means that there are heavy potential demands for trained staff in this field. Thus at the national level the first step will be the encouragement of capabilities at the local level to initiate and maintain such training programmes, in order to produce a suitable reserve of experienced management consultants who can provide information and help to small enterprises.

59. The special characteristics of small enterprises in encouraging rural development also need to be emphasized at the international policy level, and in the formulation of national and international strategies. Particularly in the least developed countries, of which the majority are in Africa, the small enterprise can play a crucial role in industrial development. The significance of that role may not be recognized and, instead, particular emphasis is usually placed upon the health sector, infrastructural development, education, poverty alleviation and nutritional aspects of development. Much more attention needs to be paid, and industry needs to have a clear voice within the debate on these issues, in order to ensure that small industrial enterprises receive recognition as the only means by which self-sustaining development help in the resolution of some of these problems.

60. Increased attention also has to be given to the potential of small and medium industries development as a means of encouraging the increased participation of women in industry. At present less than 10 per cent of the urban, female, economically active population is in the formal manufacturing sector where they represent 5 to 15 per cent of the manufacturing labour force. Given the socio-cultural factors militating against more employment of women, especially at higher levels within the larger enterprises, women's entrepreneurship development may offer greater opportunity for women to be involved in the industrialization process in Africa. When account is taken of the many responsibilities already carried by African women in

practice - often as heads of families and as main income providers - entrepreneurship development can be seen to offer an opportunity of formalizing and multiplying such skills to benefit the wider economy.

D. Environment and energy

61. Associated social problems will certainly include those of the environment, from which no industrial policy debate can take place in isolation. The specific problems in Africa relate in particular to desertification, natural resource degradation, effluent treatment and industrial pollution. As noted in chapter II (para. 30), the environmental issue is one that will necessarily be increasingly at the centre of industrial policy debate in Africa as it already is in other regions. The idea that Africa might be used as a "dumping ground" for polluting industries from other parts of the world will certainly be resisted by policy makers in Africa, but the environmental implications of industrial projects are not always immediately perceived. In particular there will be a need to upgrade capacities at the national level in environmental assessment and regulation.

62. The manufacturing implications of improved environmental control also require detailed assessment. The production of environment-related equipment and of intermediate materials used in pollution abatement and waste treatment are very significant growth areas in which African potential needs to be examined carefully, to provide guidelines for potential producers and to help in identifying investment opportunities.

63. The related issue of energy conservation also raises important questions as far as technical cooperation is concerned. For the majority of African countries, energy is a problem at the national level and that of the individual enterprise, where shortages and unreliability of energy supplies contributes to capacity underutilization and degradation of equipment. Diagnosis through energy audits and technology development and promotion will be two principal emphases as far as energy-related activities are concerned.

64. As regards energy, there is considerable scope for the development of energy savings, wood fuel utilization, and forest conservation. To reduce the rapid deforestation and soil erosion resulting from the intensive use of wood fuel areas, technologies for improved wood and charcoal utilization can be implemented and an array of projects of this type can be launched at a relatively low cost. The socio-economic and environment impacts and the integration of women in rural areas can all be addressed at the same time by creating opportunities for switching from wood fuel to other sources of energy for the suburban and rural populations.

E. Financial resources

65. The above set of themes on which to focus in industrial development should be priorities for action in the short term. Many of them involve fundamental issues of international industrial systems. In particular issues such as industrial product standards, total quality management, environmental control, industrial management skills and technological development will come into play at the same time, and the need for improved efficiency and growth opportunities in African industry will compel consideration of such issues in the steps that are taken.

66. In encouraging such developments, the technical agencies will therefore have to enter into a new partnership with the financial agencies, the bilateral programmes and private companies (national and international). Attention will have to be paid to finding appropriate mechanisms for such cooperation. The present procedures of consultation and coordination are very useful. The United Nations system itself has a long experience with the Administrative Committee on Coordination and its subsidiary bodies. Coordination in development with bilateral donors is also pursued actively through mechanisms such as round tables at the country level. However, these mechanisms need to be supplemented by new ones, in which specific commitments are encouraged from the participants and which have the flexibility to undertake rapid action to deal with changing situations. The need for this is all the more crucial in view of the accelerating pace of change in world industry referred to earlier.

67. Apart from the well-known African development financing institutions, other institutions such as the International Finance Corporation and and the African Project Development Facility are now operating in Africa. The United Nations Development Programme (UNDP) in cooperation with ADB is about to undertake a feasibility study for the establishment of an African finance corporation. The proposed corporation is expected to mobilize equity and debt capital and other finances for private sector projects. It will also assist the African countries in creating an enabling environment and improving the investment climate with a view to attracting both foreign and donestic private investments, thus giving further impetus to the emergence and expansion of industrial enterprises in Africa.

68. The BOT (build-operate-transfer) scheme may also offer an interesting mechanism to African countries to attract private and international capital for investment in infrastructure, which otherwise could not be borne by the state or public utility organizations without further increasing the national debt. A typical contractual arrangement of BOT implies that the private investor receives from Government or public enterprise for a concession period the commissioning to build and operate a plant or service and at the end of the period the ownership of the project and the right to operate it revert to the Government. During the operation period, the private investor receives delivery payment sufficient to pay back the investment in the project and to provide dividends to the shareholders of the project venture.

F. The role of subregional integration

69. Subregional cooperation can also benefit from analysis of experience in other parts of the world, especially in the light of changing industrial structures. In general, there now seems to be fairly convincing arguments against adopting a comprehensive approach initially. Many attempts at economic integration in Africa can

trace their failure to an overambitious programme at the outset. In particular, steps towards economic integration that concentrate upon harmonization of legislation or codes of practice are inevitably extremely time-consuming. Emphasis should rather be placed upon mechanisms and procedures that do not require complete uniformity and unanimity before any progress can be made. The new measures of economic integration and industrial cooperation proposed at subregional level do not have to involve all the members of that subregional organization at the outset. It will be enough at the beginning for a few countries to be involved in whatever this step is, whether it involves an investment project, a relaxation of barriers or a cooperative institution to be set up between the countries concerned. Again, special attention should be given to measures that do not necessarily have major costs associated with them, whether these are foreign exchange costs or domestic resources. Thus investment projects, in particular at the subregional level, need to be treated with considerable discrimination; the need to take subregional views and wishes into consideration can conflict with economic arguments on industrial location and by the time the conflicts have been resolved the assumptions upon which the pre-investment analysis was made may well be out-moded. Considerable efforts have been put into the promotion of such projects by some of the subregional organizations and a great deal of time has been taken up by policy makers in the countries concerned that might have been better spent resolving more pressing problems in the short term. The decision on investment projects would be better left to the private sector, especially in the industrial field, and the increased involvement of the international financing institutions in the promotion of such activities would be the most appropriate course.

70. In regional cooperation, there will be an increasing emphasis on measures that do not require unanimity and a comprehensive approach. A second change that has taken place in the character of regional cooperation is that brought about by the considerable emphasis now placed upon the private sector to which reference has already been made (see para. 40). This means that, just as national Governments have to place their main emphasis upon creating the appropriate environment for the operation of industry, so also at the subregional level there has to be a concentration of appropriate conditions in which enterprises may operate across borders, and also upon the provision of necessary services and support infrastructure for the operation of those companies in ways that will allow them to compete successfully with the changes now under way in other parts of the world. The priorities for subregional organizations thus represent a clear departure from previous ones, where emphasis was placed especially upon multinational investment projects that represent the specific industrial initiatives on the parts of the Governments of the Member States concerned. The special role of subregional organizations in the future should therefore be directed towards the wide range of industry-related services at present lacking in African industry that represent a pressing need for its future development.

71. The role of subregional organizations will be to supplement the efforts of national Governments in providing such services, to the extent that the private sector is incapable of providing them for itself. However, there will be certain cases in which the action taken will be exclusively at the subregional level, since the resources required - whether in terms of finance or in skilled people - will not be within the scope of only one individual country. This is particularly the case in areas such as R and D, quality control and specialized areas of technological services and advice.

72. Apart from the areas listed above, there is an even more important subject in which a subregional organization, as well as national Governments, have a special responsibility to encourage the role of the private sector by providing industrial information and, more importantly, by allowing it to flow freely. At present in many African countries there are severe practical constraints on the flow of information. There is sometimes an absence of foreign newspapers and journals, especially trade and professional journals, usually because there is a shortage of foreign exchange and the opportunities for these journals to circulate are very restricted. Communication within the subregion may also be difficult, both because of lack of transport and telecommunication facilities and also because there has been an external orientation more towards certain developed countries rather than neighbouring countries, especially if there are language barriers. This situation prevails particularly in West Africa although there are a number of other regions where language barriers represent a major obstacle to subregional cooperation. It is therefore particularly important that special efforts be made to ensure that information flows freely and that thereby the manufacturer gains access to the kind of market intelligence and basic facts needed for the successful operation of his or her business.

73. Another area of action, especially at the national level, will be the development of assistance to the private sector through the encouragement of partnerships and subcontracting relationships, either within the manufacturing sector of the country concerned or between enterprises in and outside the country. This can be encouraged through legislation and services that foster the growth of such partnerships. The need for them is clear; it is both as a means of achieving economies of scale and scope and also as a means of ensuring in a practical way the flow of technology and the upgrading of the necessary skills to meet enhanced competitive requirements of a larger market. Numerous examples exist of a successful upgrading of skills through the development of considered subcontracting relationships, where a close partnership is entered into between the supplying firm and the purchasing firm. This aspect has already been referred to in chapter II (para. 36) as a characteristic of the most successful aspects of modern industry and it is a process in which African industries should be especially encouraged to take part.

IV. INTERNATIONAL COOPERATION - AN OUTLOOK

A. Sectoral emphases

74. The industrial development of Africa has scarcely begun. The in many cases painful experience in industrialization through the last 20 or 30 years since independence has been for

most African countries a disappointing experience. And yet something has been achieved: countries with natural resources have in some cases been able to institute processing of raw materials instead of exporting all of them untreated. In a number of countries, against great difficulties and with support neither from Governments nor from international organizations, entrepreneurs managed to create and maintain enterprises that produced industrial products previously unknown in the country. If the achievements of African industrialization appear small, they must be considered in the light of the difficult policy environment and the inappropriate allocation of resources made at the national and international levels.

75. A transformation will not be quickly achieved. In the short term African countries will not be able to change the basic orientations of their economy from natural resources producers to become industrial countries. It is important nevertheless to lay the groundwork by selecting a set of priority areas or branches in which industrial activity can be encouraged. Industrial investment projects will have to stand or fall on their own merits, as to whether they are profitable or not, and it cannot be the task of either Governments or international organizations to attempt to change these fundamental facts. But it can, and indeed should, be the duty of policy makers, whether at national or international level to examine carefully priority areas if they would yield profitable investment projects, and those priority areas can reflect a wider concern, comprising subjects that are closely related to resource endowment or to broader issues of socio-economic development, such as housing. A large number of projects for the production of low-cost building materials can be launched with private entrepreneurs and local communities. These are typical small industries that are labour-intensive, require low capital investment and no special skills, use local raw material and improved simple technologies. Government bodies should be involved only for identification of entrepreneurs, capitalization of know-how, dissemination of information and sustainability of efforts by ensuring financial support. New mining activity for the production of local minerals that have not yet been tackled would create jobs and open small transformation industries where the special skills of people can be fully utilized. Mineral processing will continue to represent a promising area of this kind, both because of the need to maximize value added and foreign exchange earnings but also because of the spin-off in terms of the creation of auxiliary industries that supply essential inputs to the extraction and processing stages. Agro-industries represent a very obvious area of concentration for economies still heavily based upon agriculture and in need of rural development. But many opportunities exist in this field for international involvement, especially in the area of processed foods for export and of moving textile and garment production up to higher levels of international competitiveness in terms of quality and design. Again, the opportunities for increased women's entrepreneurship in the food-processing and textile industries, in which UNIDO has some encouraging experience, need to be widely developed. The same is true for leather and leather products industries, where UNIDO has developed a successful regional programme. Infrastructural development can provide a further focus for the manufacturing sector. Infrastructural investment projects should not be seen as competition for industrial projects but rather as a source of potential opportunities for the supply of local raw materials in construction, and also as a means by which increased efficiency and flow of goods, workers and consumers can contribute to a more efficient market that will encourage the consumption of industrial goods. The same considerations apply to telecommunications development. Again, in the field of transport and communications, road transport in Africa suffers from a poor network and bad quality surfaces. Systematic development of asphalt roads can be undertaken locally through simple asphalt production units within existing petroleum refineries or idle ones. (For instance, in the PTA region 3 out of 10 petroleum refineries are not operational.) The whole health sector offers a considerable potential as an area of concentration, not only in terms of an enormous range of simple equipment needed for improved health services, such as bandages, hospital utensils and simple equipment but also in areas such as vaccine development and production, where a number of successful centres already exist in Africa that could provide the focus for new industrialization options. Industrial utilization of medicinal and aromatic plants can be expanded and this could stimulate the private sector, increase women's employment, and also promote factory rehabilitation and trade between African countries. Environmental problems that require attention in Africa are not only those related to global warming. An important concern is desertification. There are also water problems and the pollution of lakes and rivers. UNIDO has strengths in some of these areas, such as drip irrigation for combating desertification and the use of ultraviolet light to destroy bacteria in water.

76. The above set of sectoral focuses for industrial development should be priorities for action in the short term. Many of them involve very fundamental issues of international industrial systems. In particular, issues such as industrial product standards, total quality management environmental control, industrial management skills and technological development will be involved in most of them and the need for improved efficiency and growth opportunities in African industry will compel consideration of such issues in the steps that are taken. This means that the role of the international organizations will be a wide one, since it will be their task to ensure that these dimensions are taken fully into account.

77. As regards the role of development financing institutions (DFI), one of the major problems in Africa is that, while substantial loans have been made available by the World Bank and the African Development Bank, there is a very low rate of disbursement. One reason for this is that national institutions have difficulty in building up the necessary capabilities and capacities to implement the projects or even design them in a bankable and implementable form. In this connection, United Nations agencies including UNIDO, have a pivotal role to play. Funds emanating from the IDDA programme, apart from their traditional usage, could be of particular value in providing assistance to the African

countries to enable them to have the World Bank loans disbursed. Sectors of concentration would be agro-industry and engineering industries. Such funds could also act as seed money and play a powerful, catalytic role in helping African countries in the disbursement of and attracting resources from DFIs. UNIDO's specific expertise in pre-investment analysis is of special relevance here.

78. Technical cooperation among developing countries (TCDC) can also be an increasingly important element in the industrial development of Africa, and many examples of enterprise-level cooperation already exist. They benefit both developing country cooperating partners. The recipient obtains appropriate technology, plant and equipment and services at much lower costs and the supplier partner benefits from market access and export earnings. Similar cooperation with Eastern European countries is another significant possibility.

B. New directions in international support

Trends in foreign direct investment

79. Compared with the total world-wide FDI, Africa accounted for only 1.19 per cent in 1991, a share that was almost identical in the late 1980s. Within the whole group of developing countries, the proportion of investment flows to Africa is rather erratic. In 1986 and 1989 it was over 12 per cent whereas in 1987, 1988 and 1990, it fluctuated between 7 per cent and 8.7 per cent. The situation appears even more discouraging since most investment is undertaken by affiliates that already have investments in Africa and there are even cases of large transnational corporations acquiring existing foreign-owned companies without contributing to the overall amount of FDI. Flows of FDI to Africa averaged $1.4 billion a year between 1980 and 1985 and rose to an average of $2.6 billion a year between 1986 and 1990. The year 1989 saw an exceptional peak of $4.4 billion although nearly 80 per cent of this investment was concentrated in just two oil-exporting countries. Yet, although this rising trend is encouraging, it must be remembered that it is, to a large extent, a reflection of the shift in investment in Africa from the public to the private sector and does not necessarily mean an increase in investment in absolute terms. Moreover, throughout the 1980s, over 70 per cent of total FDI to Africa was directed to oil-exporting countries. Non-oil exporting countries in Africa, most of which are classified as least developed countries, received on average less than $0.5 billion per year in total for all those countries during the second half of the 1980s.

Trends in official development assistance

80. Another feature of the international environment that has changed radically and which can be expected to undergo further change in the future is that of official development assistance (ODA). One influential factor is the decline in economic resources at the disposal of Governments, owing to generally depressed economic conditions in developed countries. In addition, there has been a questioning of the role of official development assistance and a search for new mechanisms to make it more effective. The phenomenon of "aid fatigue" has been remarked. The need is clear for a renewed dialogue and international examination, involving donors and recipients. At the same time, conditions are not conducive to such a dialogue in a situation where both developed and developing countries, particularly in Africa, face increasing economic difficulties, and where the latter feel that, as a result of structural adjustment programmes, they have made many sacrifices without significant impact either in terms of increased FDI or greater ODA inflow. The impact of ODA on industrial development has been very limited. The continent has yet to experience the revival in interest of foreign investors and commercial lenders now being experienced in Latin America, for example.

81. Total net resource flows to Africa have virtually stagnated over the last decade. In 1980, net flows to sub-Saharan Africa totalled $24 billion, rising to $25 billion in 1986 only to fall back to $23 billion in 1991. In the case of North Africa and Western Asia, total flows in 1980 were $17 billion, falling to $8 billion in 1986 and also amounting to $8 billion in 1991. At the same time, however, the role of aid to Africa as a share of those financial flows has become even greater. The influx of ODA, which in 1980 accounted for 50 per cent of all flows to sub-Saharan Africa, contributed 68 per cent in 1986 and a massive 83 per cent in 1991. In North Africa and Western Asia, the relative proportions were 41 per cent in 1980, 67 per cent in 1986 and 89 per cent in 1991.

82. Aid to Africa now accounts for 11 per cent of the region's GDP, compared with just 0.5 per cent of GDP in Latin American and 1 per cent in Asia. Now, however, fears are growing within Africa that it will be squeezed from centre stage in the world aid arena by the needs of the newly democratizing States. With the end of the Cold War it seems reasonable to suppose that the major donors would expand significant levels of aid to that area and reduce their involvement in African countries. Unfortunately data on ODA to Eastern Europe is not available since financial aid to this area started after 1990. Certainly aid from that source to developing countries, including Africa, has fallen.

83. The situation with respect to ODA for industry is even more complex. First of all, ODA to industry has occupied traditionally a very small part of the total, presumably because the needs of developing countries in terms of health, nutrition, and infrastructure were seen as more immediately pressing. The longer-term dynamic characteristics of industrial development were therefore neglected, from the point of view of ODA, and attention was focused on other sectors. Even here, the indirect possibilities for manufacturing were often neglected. The potential role of the local manufacturing sector in supplying inputs into development assistance projects in other sectors were not taken properly into account. A range of building materials, furniture, hospital equipment and educational materials, as well as many of the inputs to agriculture such as fertilizer, pesticides and agricultural machinery are typical components of such projects and, in principle, offer opportunities for involvement of the local manufacturing sector. Too often, however, such

possibilities were not taken into account, allowing for no indirect stimulus to local industry as a result of the ODA disbursed in the country.

84. An analysis of aid inflows by sector shows that industry, mining and construction received only 3.4 per cent of total aid from Development Assistance Committee countries in 1990, with a further 6.6 per cent of total Official Development Finance for that sector coming from the World Bank group.

C. The scope of UNIDO support

85. The new proposals of the Director-General of UNIDO for priorities and structural reform have identified five development objectives for the grouping of present and future demand and services (GC.5/23, para. 39):

(a) Industrial and technological growth and competitiveness;

(b) Development of human resources for industry;

(c) Equitable development through industrial development;

(d) Environmentally sustainable industrial development;

(e) International cooperation in industrial investment and technology.

86. In the light of the discussion in the present document, these objectives can be seen to be of special significance for African industrialization. Point (c) will be of particular relevance to the least developed countries of Africa. Combating poverty through the gradual transformation of agrarian societies into industrial economies and the associated productivity improvements will be an important part of overall socio-economic development. The proposals recognize in this connection the need to develop industrial entrepreneurship, increase the participation of women in industry and create indirectly-related employment opportunities in poverty-stricken regions through regional disposal of industrial development and the promotion of small and medium enterprises.

87. The proposals also recognize the need to enhance the field representation of UNIDO (ibid., para. 59) to promote UNIDO services at the country level, to reach an increasingly diverse clientele, including those in various regions of individual countries, and the need to develop packages of integrated services. For Africa, with a large number of countries to be addressed, the need for increased representation is critical, as is the need to provide a range of services and a multidisciplinary response. In this context, special consideration may therefore be given to the proposal for subregional offices.

D. UNIDO's ten-point programme for Africa

88. The Ministers of Industry of the African region had an opportunity prior to the fifth session of the General Conference to review collectively the industrial performance and trends and new horizons for UNIDO technical cooperation intervention at the eleventh meeting of the Conference of African Ministers of Industry, which took place at Port Louis, Mauritius, from 31 May to 3 June 1993. On the basis of that review they issued the Mauritius Declaration on Africa's Accelerated Industrial Recovery and Development in the Context of the Second Industrial Development Decade for Africa (1993-2002) and Beyond. 6/ A new approach to the problems of industrialization in Africa was outlined by UNIDO in the document entitled "The challenge of African industrialization and the UNIDO response", which contained a ten-point programme and some amplification thereof. The UNIDO response to the challenge of African industrialization will be within the framework of national or subregional plans and programmes. In addition, it will also be based on the Director-General's proposals (GC.5/23) on priorities and structural reform of UNIDO. Paragraph 55 of that document states that "UNIDO will base its delivery of services on the industrial development strategies drawn up by individual countries".

89. In the light of continued review and intensive analysis of UNIDO's programmes undertaken this year, the present section contains an elaboration of the ten-point programme, indicating possible elements that may be appropriate depending on the specific national situation.

A. Assistance in the development of appropriate strategies for industrialization in the context of market-oriented economies, and in the formulation of policies, procedures and guidelines for the enhancement of initiatives for private sector development, including in sectors of national priorities and new areas of emphasis, particularly electronics and informatics.

90. This programme point encompasses a number of subject areas. However, the common theme is the area of assistance that UNIDO would address in direct support to Governments in order to assist in building up national capacities. The present document has outlined the ways in which changes in the world economy have impelled a revision of the role of Government in industrialization. The new emphasis on the private sector and the enabling environment needed for it to flourish means that industrial policies have to take due account of that emphasis. UNIDO activities in this regard will include further development and elaboration of the approach of strategic management for industry which has been successfully applied in many African countries, as well as in other developing regions. The emphasis in that approach is upon dialogue between the private sector and policy makers so that the needs of the private sector may be better understood by providing forums and contexts in which the private sector can articulate its requirements for effective functioning. The policy makers, in turn, are given a means of determining necessary conditions to meet these requirements within the existing external and internal constraints. The international aspects of such an approach are of

---

6/ CAMI.11/13, annex VII.

particular importance: given the changes in the world economy already referred to and the impact of technological change in particular, there will be a constant need to inform both policy makers and the private sector directly of such changes and provide support in the determination of appropriate responses. The experience of other developing regions is also of specific relevance to Africa: in particular, the successful growth of many Asian countries will provide important lessons, upon which UNIDO intends to draw. Certain characteristics of this success will be specifically emphasized under this heading. They include the identification of strategic sectors, the development of technology policies, the fostering of links between technological development and industrial development, the emphasis on an export-led industrial growth and the harmonization of the industrial with the macroeconomic framework. In this dialogue, which UNIDO will support, between policy makers and the private sector there is also scope for determining the direct requirements for UNIDO support in the future. For this reason, special attention will be paid to the rationalization of the policy dialogue at the national and international level in order to make the best use of UNIDO resources and to ensure that opportunities are grasped on every occasion for better understanding within the Secretariat of the specific problems of the private sector in the individual developing countries. With respect to the issue of strategic sectors, the emphasis on electronics and informatics made under this heading is regarded as a particularly important choice. As indicated earlier in the present document (see paras. 50-54), these sectors are not just important in their own light, they are also highly significant as having an impact on technology across all production sectors. Mastery of electronics applications and computer applications in industry in general is crucial for competitiveness in the future. Even if a country is not in a position to enter into the production of electronics materials, there is nevertheless a requirement for all countries to have some mastery of the techniques of using electronics and computers to improve the efficiency of the processes and enterprises within the manufacturing sector. UNIDO will therefore concentrate in particular on the diffusion of electronics techniques in Africa, as well as the application of computers. These may be conventional applications in the sense of the traditional use of computers for management purposes, as well as in industrial automation. Under this heading national programmes will be an important focus.

B. Assistance in the development of increased regional industrial cooperation.

91. As indicated earlier, there is a major role for the subregional organizations in Africa in improving the availability of industry-related services at present lacking in African industry which represent a pressing need for future development. These include the following:

(a) Research and development;

(b) Industrial products standards;

(c) Total quality management;

(d) Human resource development;

(e) Industrial automation;

(f) Packaging and design;

(g) Marketing skills;

(h) Industrial management skills;

(i) Industrial repair and maintenance;

(j) Enterprise accounting;

(k) Inventory control;

(l) Production planning.

92. The list is not exhaustive but it indicates the wide range of industry-related services that may be an appropriate focus for subregional action. In specific cases, the UNIDO support will be the provision of assistance or the strengthening of an existing institution in the subregion in question to allow it to play a subregional role. In most cases, however, the emphasis will be upon the building up of networks in the subject. By so doing, individuals, research institutes, universities, or enterprises in the various countries will themselves be mobilized to exchange experiences, develop techniques and methodologies, and diffuse experience through the subregion. Such networks will often be more accessible and more cost-effective than supporting a simple institution located in one country at the expense of others. The role of UNIDO will be to provide an international "window" for these networks, providing advice and expertise, together with assistance in the development of software and the carrying out of diagnostic surveys. The extension of the subcontracting exchange approach at the national level to one at the subregional level is another example of the kind of linkage that will be fostered by UNIDO under this heading.

C. Implementation of an expanded programme for entrepreneurial training and development, up to the stage of preparation of business plans and development of linkages, including with foreign enterprises.

93. This programme point concentrates upon the human resource development aspects. It will concentrate in particular on mobilizing the existing entrepreneurial skills in Africa into industrial channels. The skills involved cover a wide range but the most crucial one is the ability to identify an opportunity and determine how to exploit it. UNIDO has successful experience in entrepreneurship programmes that will be further expanded under this heading. In particular, the UNIDO activity in the encouragement of women's entrepreneurship, and the training materials and workshop practices developed to date will be further enhanced. The role of software is also important: UNIDO has with its PROPSPIN and COMFAR software already made a significant impact on the specific business needs in investment project appraisal. This approach will be further developed to provide simple to use software tools that will be both educational and of practical application in the analysis of business opportunities and the enumeration of requirements for success. At another level, the programmes of technology acquisition and training and negotiation will be further developed under this heading. The acquisition of technology and the evaluation of alternatives are crucial steps in the success of many enterprises and for this reason UNIDO programmes in this regard will be strengthened

particularly with respect to Africa. Again, software for this purpose will be investigated to encourage a diffusion of the necessary skills.

D. Implementation of a comprehensive programme for development of small and medium industries.

94. Small and medium industries development does not need further arguments in its favour: the links with employment creation, with rural development and poverty alleviation are well recognized, but a comprehensive programme of small and medium industries development requires action at a number of different levels. The UNIDO focus will therefore emphasize the analysis of national policies especially as to the degree to which the framework is supportive of small and medium industries. The focus will also emphasize institutional support, providing the necessary external inputs as required to organizations of small enterprises such as chambers of commerce and industry (again, this activity will also use the opportunity to obtain feedback on UNIDO services and new requirements). The institutional support provided will concentrate on allowing these organizations to reach a wider clientele. UNIDO itself cannot directly address individual small enterprises, but the existing chamber of commerce or industry may be equally ill adapted to doing so, especially given past policies pursued at the national level. For this reason a special emphasis will be made upon diagnosis of the existing institutions and the degree to which they are structured to meet the needs of small and medium industries. The international experience of UNIDO will allow it to make recommendations in this regard, modified in the light of the intended expanded dialogue with the small and medium industries themselves, which will be a special focus of the programme. The range of services to be offered by the institutions will also call for a variety of specific support from UNIDO, depending on whether the activities are in the fields of technology, finance or management services. Two successful UNIDO programmes - in the area of subcontracting exchanges and in the encouragement of women's entrepreneurship - will be further enhanced under this heading. Valuable experience in the Jua Kali-type industries (small enterprises) will be applied in expanded programmes for rural industrialization.

E. Development of sustainable institutional capability for industrial services and support to local enterprises in cooperation with local chambers of commerce and representatives of industry groups and associations.

95. Following on the diagnosis referred to above, the specific nature of support provided by UNIDO will vary according to the identified needs. In some cases, specific training activities may be required. In other cases, assistance in the development of information systems and networks may be appropriate. The institutions may also be anxious to play new roles, for instance in investment promotion. More fundamental assessments of the purpose and functions of the institutions in question may also be required, and this may lead to specific assistance in management aspects, in training skills, and in the organization and funding of advisory services. Finally, technology services, especially in assisting in diffusion of new technologies and awareness programmes, will also be particularly important, and these will be assisted by UNIDO through providing the necessary international linkages in terms of information, expertise and partnerships. In this context, the renewed emphasis within the UNIDO Secretariat on communication, teamwork, and information systems will encourage the application of experience gained in other countries for successful operation of institutions dealing with small and medium industries.

F. Assessment of new technological applications in sectors and branches in African countries and dissemination of technological information and provision of training facilities and linkages for African enterprises.

96. The present document has emphasized the important role of technology not only in determining the new and changing structures of world industry but also in affecting the degree to which African enterprises can successfully compete at an international level. The role of UNIDO is of particular importance under this heading because its international perspective and responsibilities give it a unique outlook in this area. UNIDO support in this regard will build on and integrate existing programmes and be directed specifically towards the concerns already identified in chapter III of the present document. UNIDO will provide advisory services on technology choice and also give support to technology institutions. These may be R and D institutions or others where the purpose will be principally to demonstrate existing technologies for application in industrial enterprises. This will be particularly important with respect to computer applications and to industrial automation. In addition, UNIDO will foster cooperation between individual firms and technology institutions, especially through the development of detailed country programmes, as well as subregional programmes, in this regard. Analogous to the networks already mentioned at the subregional level, special focus will be made upon integrating technology diffusion and development policy in individual countries with the actual use of technology by the private sector in manufacturing. UNIDO will provide appropriate experience from other parts of the world in order to assist in development of these new links between enterprises within a country and the technology institutions. Similarly, international linkages for further enhancement and dissemination of technologies will also be supported by specific UNIDO action, especially through the establishment of contacts and linkages with foreign sources of specialized technological expertise. National policy for technological development will also be an increasing focus of UNIDO activity, especially directed towards integrating technology policy with industrial policy and, in consultation with other United Nations organizations as appropriate, with trade policy.

G. Assessment and determination of appropriate interrelationships between environmental and ecological needs and industrial growth and priorities in African countries.

97. UNIDO activities under this heading will include specific support in the formulation of national policies for environmental control and

specific diagnosis of the main requirements for improvement in the industrial sphere. The development of detailed environmental assessment techniques and regulatory skills will also be an area of particular support at the national level, upgrading capacities through the provision of specialized training and study tours. At the industrial branch level, diagnosis and policy recommendations and action programmes have also to be developed and UNIDO will provide assistance in this regard, in particular through specific expertise and guidelines from other countries that may assist in determining an appropriate strategic response at the industrial branch level within a country. By extension, specific enterprises, especially those potentially environmentally degrading, will also be of special focus. The provision of training and information will be a significant emphasis: many countries and enterprises will need information and skill upgrading related to techniques of pollution abatement and pollution control. In addition, the adoption of new technologies, more consistent with the goal of ecologically sustainable industrial development, will be encouraged. As noted in chapter III, the production of environment-related equipment and of intermediate materials used in pollution abatement and waste treatment are very significant growth areas in which the African potential needs to be examined carefully. UNIDO will undertake, as required, opportunity studies and feasibility studies in this regard. In addition, the encouragement of new technologies based upon natural materials, such as in the fields of pesticides and fertilizers, will also be given an increased emphasis. Given the problem of water shortage in many African countries, special focus will be placed upon the industrial use of water, in order to minimize the use of scarce resources and ensure that these are reused as much as possible elsewhere. As regards energy, there will be a special concentration on industrial energy use. The diagnosis of inefficient energy use through energy audits, building on successful UNIDO experience in this field, will be continued and expanded in African countries, in order to identify energy wastage and determine appropriate remedial action. The underutilization and degradation of industrial capacity through inadequate power sources will also be addressed through detailed programmes of electric power diagnosis, power generation upgrading, diffusion of mini hydro and other energy resources, and development of new systems of power stabilization and emergency supplies, will therefore be undertaken to improve the manufacturing sector's access to power on an assured basis. Small-scale energy use will also be a focus of attention in the UNIDO programmes, particularly in assisting in the process of rural industrialization and to minimize deforestation and consequent desertification.

H. Dissemination of information and provision of advanced management training for local entrepreneurs in African developing countries and development of sustainable institutional facilities for this purpose.

98. A number of activities under this heading complement those discussed under heading C above by focusing in particular on the needs of larger enterprises that are past the start-up phase and are seeking to expand, diversify and upgrade their quality and skills. The imperative of greater links between African industry and the world economy will make this programme area of particular significance. The need for assessment of the competitiveness of industry will be met through a set of special activities that address the key areas of modern industry management in practice. These include the following: management information systems, quality assurance, total quality management, packaging, design, marketing, and industrial finance. These important areas will be dealt with through training and awareness programmes, information activities, support to relevant institutions, direct policy advice, and the provision of suitable publications and software. Familiarity among African managers with the multiple range of skills needed in modern industrial enterprises will assist the successful growth of the enterprises, foster international linkages, and provide a basis for longer-term growth. Again, the international role of UNIDO will enable it to provide successful experience from other countries in specific applications of the new techniques. For instance, in design, the establishment of successful linkages with markets requires a close appreciation of designs, as well as of the technologies required to implement them quickly and successfully in response to market changes. Industrial design centres will be supported, but a wider approach will include the encouragement of international linkages - for instance, the establishment of partnerships between enterprises in the garment industry in developed and developing countries. In quality assurance, the growing spread of the ISO 9000 standard will be encouraged through specific information and training activities. The successful application of total quality management methods in some developed countries will be introduced to African enterprises through the establishment of awareness programmes as well as direct enterprise-to-enterprise linkages. A new emphasis on financial skills and management techniques for industrial enterprises, including aspects of financial engineering, will also be explored in the context of the African manufacturing sector.

I. Expansion of investment promotion activities and assistance in identifying and contacting potential foreign partners on a continuing basis.

99. The growing internationalization of the manufacturing sector and the need for African industry to become fully a part of this process, make very necessary the accordance of a high priority to investment promotion activities and the fostering of partnerships between African industry and firms overseas. The benefits are not only in terms of capital resources, but more importantly the upgrading of technology and skills that may take place as a consequence. Investment promotion activities will continue to be addressed through the many tools at the disposal of UNIDO, such as investors guides, investment forums, the Investment Promotion Service network, etc. However, the range of partnerships considered will be expanded to include a wider appreciation of the various types of linkages that may be envisaged. The traditional investment project seeking financial backers from abroad will continue to be a focus of UNIDO activity in Africa, as in other parts of the world. However, other forms of partnership including technology licensing, joint ventures, subcontracting, joint marketing agreements, and strategic alliances of a variety of forms will also be encouraged by UNIDO. This

will be done especially through the initiation of an integrated information system that will assist UNIDO in identifying suitable contacts and appropriate partnerships for African enterprises on request. The process will be further enhanced by the systematic collection and classification of information on African industry at the enterprise level. Investment promotion will also be furthered by assisting in institutional development, expanding the support given to national investment offices in African countries, and giving advice and support services on the establishment of industrial estates and export processing zones.

J. Increased dissemination of industrial information to African countries.

100. Information dissemination is a very wide-ranging set of activities, yet it is probably - given the emphasis on the private sector and the fact that industrial development will be undertaken mainly by a large number of small enterprises - the most effective means by which UNIDO can familiarize African manufacturers with economic, technological and market issues of relevance to their success and the growth of their enterprises. UNIDO will do this in two ways, by expanding its international network of information provided on request to African countries, and also by assisting in the formation of information networks within the countries themselves, complemented by subregional activities of this kind. The means by which UNIDO disseminates information will be kept constantly under review, focusing in particular on the possibilities for expanded computer linkages among countries and with UNIDO, the provision of user-friendly software to allow for easy access to information, the diffusion of information on electronic media such as CD ROMs, and a new, systematic approach to publications based on an assessment of the major needs of African industry in information terms and a careful consideration of the forms in which this information might be conveyed. The production processes of publications and other media within UNIDO will be accelerated in this regard in order to ensure that the information provided to African Governments and enterprises is up to date and readily accessible. Similarly, the means by which this information will be disseminated will also be reviewed to ensure that the publications and other media reach those best able to make use of them.

V. CONCLUSION

101. The main lines of activity indicated above that deal with the new ten-point UNIDO orientation for its programmes in Africa, represent only a modest response to the many great problems affecting industrialization prospects in Africa. Nevertheless, they also represent a strategic response, one which may achieve the maximum use of UNIDO skills and resources directed towards the most pressing problems encountered in the manufacturing sector. The activities have to be seen in the context of the limited resources of UNIDO, both in staff and in financial terms, and the other pressing claims upon its services. The implementation of the above programme will therefore depend critically upon a coordinated mobilization of these resources within the Secretariat. Elsewhere, as another part of the documentation for the fifth session of the General Conference (GC.5/23), the Director-General of UNIDO has outlined the new orientation of UNIDO activities as a whole and the new practices to be introduced in order to derive most effective benefits from that orientation. The introduction of more structured teamwork within the Secretariat, the devolvement of responsibility and improved information systems will increase the likelihood of effective responses from UNIDO in terms of the ten-point programme for Africa. Continued dialogue with the development partners in Africa, improved communication with the private sector and, especially, a greater reliance upon experts and institutions from the region will also contribute decisively towards the achievement of these aims.

102. The problems of African industrialization are very great and very complex, and the targets very diverse and rapidly changing. As has been discussed in the present document, the world industrial system is an increasingly elaborate one whose products, processes and organizational approaches are determined by accelerating technological change and frequent changes in consumer markets. If Africa is to industrialize successfully it will have to become more fully integrated into that system, which is the repository of most of the skills, techniques and financial resources so badly needed in Africa today. This in no way diminishes the importance of small and medium industry development, which will continue to be an essential target not only for its own role in spreading industrial activity, in helping rural development, in raising incomes and particularly in encouraging the involvement of women, but also because such development provides the basis for the sustained development of larger enterprises that can grow to meet the competitive challenges of the world economy.

103. Many development partners and other actors are concerned with industrial development in Africa, and the future role of UNIDO will call for increased involvement with such partnerships. They include development finance institutions, the transnational corporations and other developing countries and their enterprises outside Africa. African countries themselves are accelerating the process of regional integration, and African enterprises are increasingly seeking new relationships and wider horizons. Development partnerships will be mirrored by investments and joint ventures in the private sector, and these relationships will offer important opportunities for UNIDO to provide further support, based on its growing concentration of technical expertise. The figure below shows some of the ways in which UNIDO supports industrialization in Africa, now or in the future. It distinguishes between UNIDO action at the national and private sector levels, together with the kinds of specialized technical services UNIDO can offer to other partnerships.

104. However, the pressing needs of African industry are very great in relation to UNIDO resources. For this reason a continuing prioritization of activities will be necessary. Increased efficiency and effectiveness may derive not only from a reduction in areas of emphasis but by giving special attention to the identification of areas of commonality in UNIDO activities. Improved internal information systems will mean greater consistency and coordination of effort, making sure that UNIDO activities support one another towards the goal of African

industrialization. Three broad categories of activities may be distinguished:

(a) Management: keeping enterprises going and growing;

(b) Information: supplying what industry needs to know;

(c) Investment: mobilizing new finance for industry.

105. These three categories are interlinked and cover a wide variety of activities services and industrial branches. The UNIDO response to the challenge of African industrialization must therefore increasingly search for economies of scope, developing modular packages of specific services that can be fitted together rapidly, flexibly and economically to meet the needs of Africa's manufacturing sector. Such an approach will mirror the ways of working that now pervade world industry.

Figure 1: The focus of cooperation

	African Governments	African private sector
A. DIRECT UNIDO ACTION		
UNIDO . . . . . ▸	Policy advice Strategic Management of Industrial Development Information on world industry Technical assistance in institutional development	Enterprise strategy advice Support for chambers of commerce and industry associations Technical cooperation Technology selection and promotion Investment promotion Techno-economic information Rehabilitation
B. UNIDO SUPPORT TO OTHER PARTNERSHIPS		
African Governments . . . . . ▸	Studies on regional integration Assistance in regional institutional development Regional information systems Regional investment promotion	Institutional development Policy environment
African private sector . . . . . ▸		Joint ventures Investment promotion Subcontracting Technical cooperation Feasibility studies
Development financing institutions . . . . . ▸	Industrial surveys Rehabilitation diagnostics Privatization Project identification	Market studies Pre-investment studies Technology selection Procurement
Transnational Corporations . ▸	Policy advice Investment codes Export processing zones Industrial estates	Joint ventures Subcontracting
Other developing countries . . ▸	Economic cooperation among developing countries strategies Technical assistance in ECDC Institutional development	Market studies Pre-investment studies Investment promotion Joint ventures Licensing

Distr.
GENERAL

GC.5/19
22 September 1993

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 12 (a) of the provisional agenda

POLICY MANAGEMENT: EVALUATION ACTIVITIES OF UNIDO

Report by the Director-General

Summary

In compliance with paragraph 5 (c) of General Conference resolution GC.4/Res.16, reports on the implementation of that resolution, in particular arrangements for future financing of evaluations, strengthening of Evaluation Staff and steps initiated for in-depth evaluation of trust fund programmes.

CONTENTS

	Paragraphs	Page
Introduction	1	1
Chapter		
I. STATUS OF IN-DEPTH EVALUATIONS OF HEADQUARTERS PROGRAMMES	2 - 5	1
II. IMPLEMENTATION OF EVALUATION RECOMMENDATIONS	6 - 8	2
III. IMPACT ON INDUSTRIAL DEVELOPMENT IN DEVELOPING COUNTRIES	9 - 10	2
IV. ASSESSMENT OF IMPLEMENTATION OF RECOMMENDATIONS OF IN-DEPTH EVALUATIONS AND THEIR IMPACT	11 - 12	3
V. FINANCING OF IN-DEPTH HEADQUARTERS PROGRAMME EVALUATIONS	13 - 18	3
VI. STRENGTHENING OF THE EVALUATION STAFF	19	3
VII. ACTION REQUIRED OF THE CONFERENCE	20	3

Introduction

1. The importance of evaluation as an essential element in ensuring that the central objectives of the Organization are met was most recently reiterated by the General Conference at its fourth session in resolution GC.4/Res.16. In the same resolution the Conference gave the Director-General a number of specific mandates, the status of implementation of which has in some cases been covered in subsequent reports to the policy-making organs. The present document should therefore be read in conjunction with those documents, reference to which is made in the respective portions of the present report.

I. STATUS OF IN-DEPTH EVALUATIONS OF HEADQUARTERS PROGRAMMES (GC.4/Res.16, para. 1 (a))

2. At the time the General Conference adopted resolution GC.4/Res.16, three of the in-depth evaluations of headquarters programmes requested by the Board in decision IDB.5/Dec.12 had not been completed. The following paragraphs constitute a status report on those evaluations.

Industrial human resource development

3. The evaluation was completed and made available to the Board at its eleventh session. A summary of the evaluation was submitted to the

V.93 88787 6117E

Distr.: 28 September 1993

same session (IDB.11/CRP.3). In its decision IDB.11/Dec.3, the Board took note with appreciation of the in-depth evaluation report and recognized the strategic importance of industrial human resource development as it is interrelated with other elements. Furthermore, the Board urged the Director-General to coordinate the various human resource development-related activities and programmes in industrial development sectors on the basis of an integrated thematic approach, based on the three themes suggested by the evaluation report, namely: employment and manpower development, science and technology and social issues. In compliance with paragraph (g) of the Board decision, further consideration was given to the subject in the review of the programmes and structure of UNIDO, which will be reflected in the Director-General's proposals for priorities and structural reforms of UNIDO being presented to the resumed eleventh session of the Board.

Development and transfer of technology

4. As reported in document GC.5/10, paragraph 173, a modest beginning was made in 1992 to undertake the evaluation. The preliminary investigations in 1992 were undertaken with the assistance of an external consultant, and relevant activities were resumed in the second quarter of 1993. In view of the breadth of the subject, detailed desk reviews are being undertaken to establish a set of valid definitions and concepts. Based on evolving trends and requirements, a summary of key issues pertaining to the subject matter will be developed to guide the evaluation team in assessing the relevance and significance of UNIDO's mandates, programmes and activities. Subsequently, an evaluation of its operational activities will be carried out. Also in document GC.5/10, the Director-General reported that approximately $250,000 would be required for consultants and travel over a period of one and one-half years - once resources were available - to complete the evaluation. While the majority of work is being undertaken by the Evaluation Staff, supplementary consultancy and travel funds are still required from extrabudgetary resources in order to obtain specialized expertise and undertake field investigations on the impact of the programme activities.

Special trust fund projects

5. Since special trust funds represent an alternative technical cooperation funding mechanism for a wide variety of technical cooperation activities, an in-depth evaluation of representative samples of such projects is being undertaken. That evaluation is being carried out in accordance with UNIDO's established policies and procedures, as specified in Director-General's Bulletin UNIDO/DG/B.106 and illustrated in document GC.4/30. Evaluation plans for selected projects were negotiated and agreed with a number of donors and beneficiaries. In-depth evaluations have been or are being carried out on projects financed by Denmark, Japan and Nigeria. In addition, desk studies have been prepared for a number of smaller projects. At the same time, statistical data are being collected and analysed to obtain an overview of the overall breadth and magnitude of projects financed under special trust fund arrangements. A summary of all these investigations is expected to be completed in the first quarter of 1994. Whether further evaluation work will be needed to meet the requirements of the policy-making organs in that respect will be determined during the preparation of the summary report.

II. IMPLEMENTATION OF EVALUATION RECOMMENDATIONS (GC.4/Res.16, para. 1 (b))

6. In paragraph 1 (b) of resolution GC.4/Res.16, the General Conference requested the Director-General to ensure the full implementation of in-depth evaluation recommendations within two years of the completion of an evaluation and to report on the actions taken thereon. Two evaluations now fall under this category: those on the System of Consultations and on investment promotion activities. For a report on the follow-up of those two evaluations, see chapter IV below.

7. To ensure a more systematic and transparent implementation of recommendations of in-depth headquarters programme evaluations, the Evaluation Staff has developed a draft report format that summarizes:

(a) Recommendations made;

(b) Position of UNIDO's management *vis-à-vis* those recommendations;

(c) Decisions taken by management and policy-making organs;

(d) Status after two years.

8. The eventual use of such a format will systematize the follow-up to recommendations, particularly those that were accepted and that are under implementation. Reporting after two years will thereby become more transparent and comprehensive. In improving the system further, a mechanism will need to be developed to fulfil the Member States' request that an assessment be made of the impact of the application of evaluation recommendations as requested in paragraph 1 (c) of resolution GC.4/Res.16 (see chap. III below).

III. IMPACT ON INDUSTRIAL DEVELOPMENT IN DEVELOPING COUNTRIES (GC.4/Res.16, para. 1 (c))

9. All evaluations consider the impact (significance) on industrial development of the Organization's activities as one of the main criteria against which programmes and projects are rated. Moreover, evaluations themselves can have an impact on industrial development insofar as they are oriented to enhancing the Organization's effectiveness. The realization of such organizational effectiveness is the responsibility of executive management based on the recommendations of evaluations. Follow-up should remain outside evaluation work in order to avoid conflict of interest. In response to various decisions and resolutions of the policy-making organs, management has been reporting on programme improvements based on evaluation recommendations (see chap. IV below).

10. Impact will necessarily depend on the extent to which UNIDO accepts and implements evaluation

recommendations and whether revised activities bring about improved relevance and sustainability of benefits. Further analysis would be required to measure that extent.

IV. ASSESSMENT OF IMPLEMENTATION OF RECOMMENDATIONS OF IN-DEPTH EVALUATIONS AND THEIR IMPACT (GC.4/Res.16, para. 1 (d))

System of Consultations

11. In his report to the Board at its ninth session on measures to enhance the System of Consultations (IDB.9/14), the Director-General reported on the implementation and impact of the evaluation of the System of Consultations. In response to that report, the Board requested the Director-General to carry out a number of specific measures designed to enhance the efficiency and effectiveness of the System of Consultations (IDB.9/Dec.9). Further information on the implementation of recommendations of the evaluation is provided in the Annual Report of UNIDO, 1992 (IDB.11/10, chap. 4.A) and in document GC.5/10 (paras. 113-123).

Industrial investment promotion activities

12. In response to resolution GC.4/Res.17, paragraph 3 (g), the implementation of the recommendations of the evaluation of UNIDO's investment promotion activities was reported on in document IDB.9/7, paragraphs 23 to 44, and in the Annual Report of UNIDO, 1992 (IDB.11/10, chap.IV.A).

V. FINANCING OF IN-DEPTH HEADQUARTERS PROGRAMME EVALUATIONS (GC.4/Res.16, para. 2)

13. In-depth evaluations of headquarters programmes are mostly carried out by the Evaluation Staff of UNIDO as part of their regular activities. However, additional financing is required for field investigations, for visits to multi- and bilateral organizations in industrialized countries in order to discuss policies and programme complementarities and for specialized consultants. The regular budget allocation of the Evaluation Staff for this purpose (travel and consulting) amounts to $28,300 for the biennium 1992-1993.

14. Extrabudgetary requirements for previous headquarters programme evaluations were financed as follows:

Programme	Source of funds	Amount in US$
System of Consultations	Netherlands	45,382
Investment promotion	Germany/Switzerland	30,000/45,000
Economic and technical cooperation among developing countries	Regular budget	40,000
Human resource development	Germany (including former German Democratic Republic)	330,580
Special trust funds	Denmark	32,000
	Japan	120,176
	Nigeria	11,930

15. UNIDO appreciates the generous support of the donors listed below, without which it would not have been possible to meet the financing requirements of in-depth headquarters programme evaluations.

16. Programme evaluations should be considered as an integral part of the programme cycle - a practice already well established for in-depth project evaluations. Programme evaluations, therefore, should be planned and budgeted for at design and approval stage, as is the case in project evaluations.

17. However, in the case of those programmes for which the Board requested evaluations in its decision IDB.5/Dec.12, no financial provisions had been made in the respective programme and budgets. In view of the prevailing zero-growth budgets resource reallocations for in-depth evaluations could not be accommodated under the regular budget and had to be referred to special contributions under the Industrial Development Fund.

18. An alternative strategy would be to establish an umbrella project covering a range of headquarters programme evaluations rather than negotiating the funding of individual evaluations on a case-by-case basis. That approach would increase flexibility and autonomy for carrying out evaluations as well as ensure that those exercises are undertaken smoothly and without delay. Contributions from various Member States could be invited for that purpose. The Evaluation Staff would manage and report on the utilization of funds under such an umbrella project. Such an arrangement would help ensure that evaluations be carried out in a properly phased and timely manner.

VI. STRENGTHENING OF THE EVALUATION STAFF (GC.4/Res.16, para. 5 (c))

19. The Evaluation Staff has been strengthened with one additional Professional post, which was filled in August 1993. In addition, the position of the Head has been upgraded from P-5 to D-1. The unit is now operating satisfactorily at the capacity indicated in the approved programme and budgets for 1992-1993 (GC.4/42).

VII. ACTION REQUIRED OF THE CONFERENCE

20. The Conference may wish to take note of the information contained in the present document and to provide guidance on the options outlined in chapter V.

Distr.
GENERAL

GC.5/20
19 October 1993

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Items 11 (b)(i) and (ii) of the provisional agenda

EXECUTIVE SUMMARY OF INDUSTRY AND DEVELOPMENT: GLOBAL REPORT 1993/1994

Prepared by the Secretariat

CONTENTS

		Paragraphs	Page
Introduction		1	1
Chapter			
I.	THE GLOBAL ECONOMY: SHORT- AND MEDIUM-TERM OUTLOOK	2 - 24	1
II.	INDUSTRIAL PERFORMANCE AND PROSPECTS IN THE MAJOR REGIONS	25 - 46	14
III.	TRADE AND INDUSTRIALIZATION	47 - 57	17
IV.	A SURVEY OF SELECTED MANUFACTURING INDUSTRIES	58 - 62	20

Introduction

1. UNIDO, in its annual Global Report, presents its perspective on global industrialization. The purposes of this publication are twofold: to provide an annual review of the latest trends in the global industrial landscape and of the near-term prospects for industrialization in developing countries, and to present an in-depth assessment of selected issues of crucial importance to the industrialization of developing countries. The annual review consists of analyses at the global (chap. I), regional and subregional (chap. II) and industry (chap. IV) levels. The analyses of chapter III focus on the role of international trade in industrialization, and the extent to which the experience of the Asia-Pacific model of export-led industrialization is relevant to industrialization strategy in sub-Saharan Africa.

I. THE GLOBAL ECONOMY: SHORT- AND MEDIUM-TERM OUTLOOK

A. UNIDO projections for 1993 and 1994

2. From near zero growth in 1991, world output failed to rebound strongly in 1992, with a growth rate in world gross domestic product (GDP) of only 1.3 per cent. World manufacturing suffered negative growth in 1991 and 1992, and will rise to only 0.4 per cent in 1993. While growth momentum should return by 1994, the continuing sluggishness of many cyclical indicators in the major economies makes it difficult to project the exact timing of global economic recovery. The 3.1 per cent growth projected in 1994 for world GDP is therefore the most tentative one UNIDO has offered in the last 10 years of its projection exercises; so too is the projection for the growth of world manufacturing value added (MVA) in 1994 of 3.6 per cent, up from 0.4 per cent in 1993. Forecasts of GDP and MVA for 1993 and 1994, for some 140 countries organized into 10 regions or subregions are summarized in table 1. Table 2 displays the share of developing countries in world MVA, by major industry for the years 1975, 1990 and as projected for 1994. This table also displays sectoral MVA growth rates for the developing and the developed market economy countries for the periods 1975-1985 and 1985-1993. While MVA in the developing countries has grown about twice as fast as in the developed countries over both periods, their progress in catching up to the developed market economies has been limited. During the 15 years from 1975 to 1990, the developing countries' share of world output increased by only 2.8 percentage points. In fact the projected gain in share between 1990 and 1994 exceeds the gain over the previous fifteen years as indicated in figure 2. There are two reasons for this surge. First, the slowdown in the world economy has hit the developed economies harder than the developing economies. But the main factor underlying the projected increase in the

V.93 88912 6245E

Distr.: 22 October 1993

Table 1. Regional and country estimates of GDP and MVA growth for 1992 and projections for 1993 and 1994
(Percentage)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
World	1.3	1.2	3.1	-0.9	0.4	3.6
Developing countries (excluding China)	3.5	4.0	4.4	3.0	5.0	6.0
Developed market economies	1.4	1.0	2.5	-0.8	-0.5	2.2
China	12.8	10.0	8.2	21.7	15.0	10.0
Eastern Europe and former USSR (excluding former Yugoslavia)	-12.1	-10.7	1.1	-18.9	-13.6	1.7
North America	2.0	2.4	3.0	2.9	2.7	3.8
Bermuda	1.9	2.0	2.5	2.3	2.4	2.5
Canada	0.9	3.0	3.3	0.5	5.2	3.0
United States	2.1	2.3	3.0	3.1	2.5	3.8
Western Europe	1.2	-0.3	1.9	-1.0	-2.8	1.1
Austria	1.5	-0.9	1.1	-	-2.8	1.1
Belgium	1.3	-	1.2	-2.4	-1.0	0.9
Denmark	1.1	1.1	2.1	1.9	-2.4	1.3
Finland	-3.6	-	2.0	1.5	4.4	2.6
France	2.0	-0.8	1.9	-1.4	-3.6	0.6
Germany, eastern part	6.0	3.0	4.2	8.4	4.6	6.1
Germany, western part	1.5	-1.7	1.3	-2.1	-6.3	-0.6
Greece	1.4	1.5	2.0	-0.9	-0.1	0.7
Iceland	-4.3	-0.7	1.2	-8.5	0.1	-0.1
Ireland	2.1	1.2	1.8	9.8	2.8	4.7
Israel	6.4	3.8	6.0	8.5	4.1	6.2
Italy	1.0	-0.8	1.8	-1.8	-3.8	1.3
Luxembourg	1.7	3.5	3.3	-0.8	3.4	3.1
Malta	5.3	3.4	4.7	4.9	2.8	4.3
Netherlands	1.8	-0.7	1.5	0.2	-0.3	1.5
Norway	3.3	0.5	2.1	1.5	-1.3	0.0
Portugal	2.7	0.8	2.2	-4.0	0.1	1.9
Spain	2.0	-0.4	2.0	-2.0	-3.7	0.4
Sweden	-0.9	-1.6	1.4	-3.9	-6.3	0.2
Switzerland	-0.7	-0.5	1.0	-0.7	-1.3	1.1
United Kingdom	-0.6	2.0	3.1	-0.6	1.4	2.8
Eastern Europe and former USSR (including former Yugoslavia)	-12.3	-10.7	1.0	-19.1	-13.9	1.4
Albania	-16.0	-5.0	3.1	-20.0	-12.0	-3.2
Bulgaria	-15.0	-9.0	2.5	..	..	..
Former Czechoslovakia	-9.0	-3.0	1.0	-12.4	-4.5	-0.7
Hungary	-3.0	-	2.0	-8.5	-1.6	1.9
Poland	0.5	1.5	3.3	3.4	1.5	4.0
Romania	-15.0	-9.0	-	-22.0	-14.0	-10.0
Former USSR	-12.8	-12.0	1.0	-20.0	-15.0	2.0
Former Yugoslavia	-17.0	-11.0	-2.0	-24.3	-21.3	-10.2
Japan	0.8	1.1	2.5	-6.2	-0.8	1.8

(cont'd)

Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Other developed countries	1.4	2.3	2.7	-1.3	0.9	1.7
Australia	2.2	3.0	3.4	-1.3	1.2	2.1
New Zealand	2.5	3.2	3.2	5.9	3.9	3.9
South Africa	-0.9	0.5	1.0	-3.4	-0.6	0.2
Latin America and the Caribbean	2.3	3.1	3.5	1.1	3.0	3.8
Argentina	8.7	6.0	6.5	13.9	9.1	10.1
Bahamas	-1.1	2.3	3.9	..	..	..
Barbados	-3.0	0.8	4.4	-7.1	0.4	2.8
Belize	-0.3	3.7	4.3	1.4	1.3	2.8
Bolivia	3.8	4.1	4.2	4.5	4.9	5.0
Brazil	-0.9	3.0	3.0	-3.4	2.0	2.0
Chile	10.4	5.0	4.3	17.6	7.0	6.0
Colombia	2.7	3.4	3.8	1.5	2.6	3.3
Costa Rica	7.3	4.5	4.7	8.6	5.1	5.4
Cuba	-10.0	-3.0	-	-11.0	-7.0	-2.0
Dominican Republic	7.7	5.3	3.0	9.5	5.8	2.1
Ecuador	3.7	3.2	3.9	2.8	3.2	3.4
El Salvador	4.6	4.2	4.4	5.3	4.9	5.2
French Guiana	1.4	-	0.6	2.3	1.9	2.1
Guadeloupe	1.8	4.1	2.7	1.4	1.5	2.0
Guatemala	4.6	3.5	4.0	4.6	3.4	4.0
Guyana	7.8	5.0	5.0	11.8	10.8	8.2
Haiti*	-10.0	-8.5	-5.3	-19.3	-16.5	-10.7
Honduras	4.3	3.9	3.9	4.4	4.3	4.8
Jamaica	2.0	1.7	2.0	1.7	1.5	1.8
Martinique	6.1	6.5	5.0	1.9	1.8	2.1
Mexico	2.8	2.5	4.0	1.8	2.9	5.1
Montserrat	0.3	2.9	4.0	6.3	4.4	5.7
Netherlands Antilles and Aruba	-1.0	1.3	-0.7	2.7	2.4	2.7
Nicaragua	-0.6	1.9	3.0	0.0	3.0	5.0
Panama	7.6	3.0	2.8	7.2	2.4	2.1
Paraguay	1.7	1.9	2.0	0.8	0.9	1.1
Peru	-2.8	2.5	1.5	-6.2	2.6	1.4
Puerto Rico	1.0	2.5	4.0	1.7	3.3	4.9
Suriname	1.4	2.4	1.4	1.0	1.5	0.5
Trinidad and Tobago	0.0	1.0	1.3	-1.3	1.7	0.6
Uruguay	7.4	3.0	3.8	8.3	2.6	3.6
Venezuela	7.3	4.0	2.0	8.3	5.1	3.2
Tropical Africa (sub-Sahara)	0.5	2.0	2.4	-0.1	2.7	3.3
Benin*	2.8	1.1	1.6	5.0	4.2	3.3
Botswana*	4.0	7.0	8.1	..	..	..
Burkina Faso*	4.0	2.4	2.4	3.0	2.6	2.1
Burundi*	2.4	1.0	3.6	1.0	4.2	3.5
Cameroon	-4.0	-3.6	-2.9	-4.8	-4.1	-3.0
Cape Verde*	5.0	3.8	4.3	6.5	6.6	6.5
Central African Republic*	0.2	-0.1	0.7	1.9	1.8	2.0
Chad*	3.0	0.7	-0.3	2.6	0.2	-1.1
Congo	3.2	5.0	5.2	8.7	4.2	6.3
Côte d'Ivoire	0.7	1.0	2.5	2.0	1.7	3.6
Djibouti*	2.9	2.7	2.4	4.0	3.8	3.7
Equatorial Guinea*	-4.3	-4.5	-2.4	-4.9	-6.3	-3.9

(cont'd)

Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Ethiopia and Eritrea*	1.0	-	1.5	-3.7	0.2	0.6
Gabon	1.5	2.5	3.0	..	..	..
Gambia*	8.4	5.7	4.0	4.9	3.4	2.4
Ghana	3.9	4.6	6.1	5.8	7.5	11.0
Guinea*	2.1	0.6	1.9	2.5	2.1	2.4
Guinea-Bissau*	2.2	2.4	2.9	-0.1	-0.3	-
Kenya	1.0	2.1	3.8	2.5	3.0	6.0
Lesotho*	3.4	6.9	5.0	..	..	..
Liberia*	-1.2	-3.7	-2.5	0.3	-4.6	-2.8
Madagascar*	-2.0	-0.9	-1.4	-5.3	-3.4	-3.1
Malawi*	-7.9	0.9	0.1	-1.2	4.0	4.1
Mali*	0.3	3.2	2.3	3.3	4.2	4.6
Mauritania*	1.4	1.1	2.8	6.3	6.4	6.3
Mauritius	5.8	6.9	6.4	8.8	9.9	9.4
Mozambique*	-	0.5	-2.3	-0.2	-0.9	-3.4
Namibia	1.0	1.9	2.0	..	..	..
Niger*	1.6	1.4	2.2	1.3	1.3	1.5
Nigeria	4.3	4.0	3.5	5.7	7.5	4.5
Reunion	4.7	4.2	5.0	4.1	4.3	3.7
Rwanda*	-19.0	-2.0	-5.0	..	..	..
Sao Tome and Principe*	0.8	-2.5	-2.5	1.3	-1.3	-1.3
Senegal	3.3	2.1	3.1	3.1	4.0	3.6
Seychelles	1.9	2.9	3.6	7.9	8.4	8.8
Sierra Leone*	3.5	1.1	-0.6	0.8	0.1	-1.6
Somalia*	-7.0	-	-4.3	..	..	..
Swaziland	4.1	3.4	4.3	6.0	4.5	6.0
Togo*	-1.5	1.3	2.2	-0.9	1.7	2.5
Uganda*	3.5	3.2	3.8	5.7	4.6	6.2
United Republic of Tanzania*	2.2	2.6	2.9	2.9	2.6	3.5
Zaire*	-6.1	-3.0	-2.1	-8.4	-4.7	-3.7
Zambia*	-2.2	0.1	-0.6	-2.6	0.3	0.5
Zimbabwe	-11.0	3.5	4.5	-10.1	4.3	5.0
North Africa	1.3	1.4	2.9	4.1	3.5	4.4
Algeria	-1.8	-0.4	1.1	-2.2	-3.4	1.5
Egypt	2.8	3.3	3.9	6.0	7.0	3.1
Libyan Arab Jamahiriya	0.9	0.1	3.5	9.7	9.9	10.2
Morocco	3.3	3.1	3.5	4.4	3.9	4.1
Sudan*	2.0	2.5	1.9	1.0	1.4	1.0
Tunisia	8.0	4.0	5.8	12.0	6.9	9.1
Western Asia	6.4	5.2	4.4	7.6	6.7	6.4
Bahrain	1.3	2.3	3.1	1.6	2.1	2.6
Cyprus	1.4	2.0	3.1	2.0	3.4	4.4
Iran (Islamic Republic of)	9.0	3.5	2.9	8.6	4.6	4.2
Iraq	-2.0	2.0	2.8	-1.1	8.0	5.3
Jordan	11.0	8.7	9.3	7.8	7.0	6.8
Kuwait	20.0	..	8.0	20.7	..	7.5
Oman	7.0	7.8	6.1	..	..	..
Qatar	4.0	5.0	4.5	9.7	9.8	9.7
Saudi Arabia	5.0	5.0	4.5	7.7	7.7	7.7
Syrian Arab Republic	7.0	5.0	5.7	..	..	..
Turkey	5.3	4.8	5.0	6.6	6.0	6.2
United Arab Emirates	3.5	4.0	4.5	10.4	8.4	7.6
Yemen*	3.5	6.5	8.1	8.5	8.6	8.5

(cont'd)

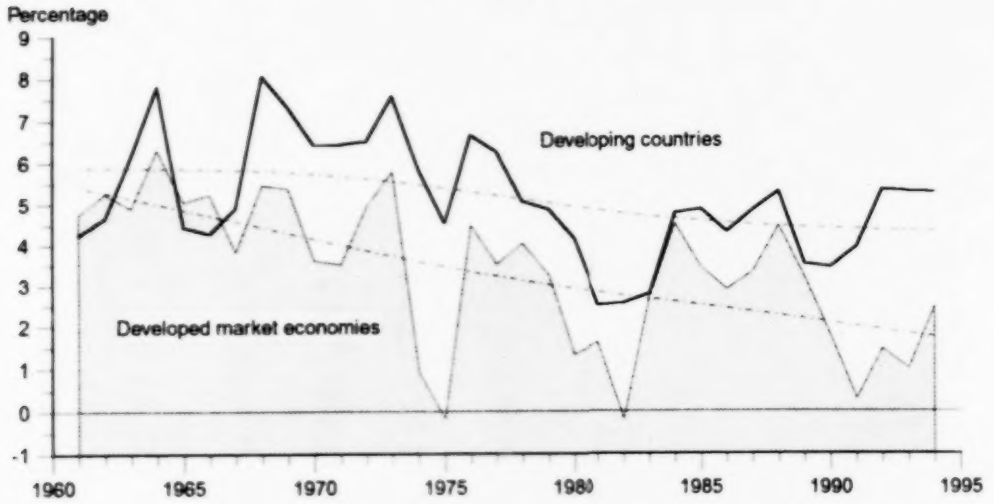
Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Indian Subcontinent	4.4	4.7	4.6	3.3	7.9	6.9
Afghanistan*	3.0	3.0	4.0	4.0	3.4	3.7
Bangladesh*	3.9	4.6	4.0	10.1	..	..
Bhutan*	5.0	7.8	6.0	6.0	8.0	12.9
India	4.2	4.5	4.5	2.2	8.0	7.0
Myanmar*	1.2	1.5	0.8	1.1	6.0	1.3
Nepal*	3.1	3.7	5.2	1.5	3.0	1.4
Pakistan	6.4	6.3	6.0	7.7	8.0	6.9
Sri Lanka	4.3	4.4	4.1	7.5	8.0	7.2
East and South-East Asia, Oceania	5.5	6.2	6.8	6.0	7.4	8.8
Brunei Darussalam	2.0	0.4	3.3	2.4	0.6	3.9
Fiji	4.2	1.0	0.5	7.4	4.3	-2.2
French Polynesia	4.0	5.7	5.4	5.2	4.7	7.1
Hong Kong	6.0	5.5	5.1	4.6	4.3	4.4
Indonesia	5.7	6.1	6.5	8.9	7.0	8.4
Macao	..	..	..	..	..	..
Malaysia	8.1	7.8	8.0	9.2	10.8	11.5
New Caledonia	9.0	7.7	8.6	6.7	5.8	6.9
Papua New Guinea	9.0	9.0	8.0	15.1	14.6	13.9
Philippines	0.0	4.1	5.1	3.0	5.1	5.8
Republic of Korea	4.8	6.0	7.5	5.1	8.0	11.5
Samoa*	-5.0	3.0	1.1	-0.6	0.2	-0.6
Singapore	5.8	5.8	6.5	6.0	5.9	7.1
Taiwan Province	6.1	6.7	6.4	3.1	5.9	5.1
Thailand	7.4	7.6	8.1	9.0	9.2	9.8
Tonga	1.9	1.2	2.8	6.3	2.9	7.9
Tuvalu*	..	..	..	..	..	..
Vanuatu*	-	3.8	4.5	13.7	13.4	13.3
Centrally planned Asia	12.1	9.4	7.9			
China	12.8	10.0	8.2	21.7	15.0	10.0
Democratic People's Republic of Korea	-5.0	-6.2	-5.0	..	..	..
Lao People's Democratic Republic*	7.3	5.9	5.8	8.0	8.1	8.5
Mongolia	-7.6	-10.0	-	-14.2	-5.0	-
Viet Nam	8.1	7.5	8.0	..	..	..

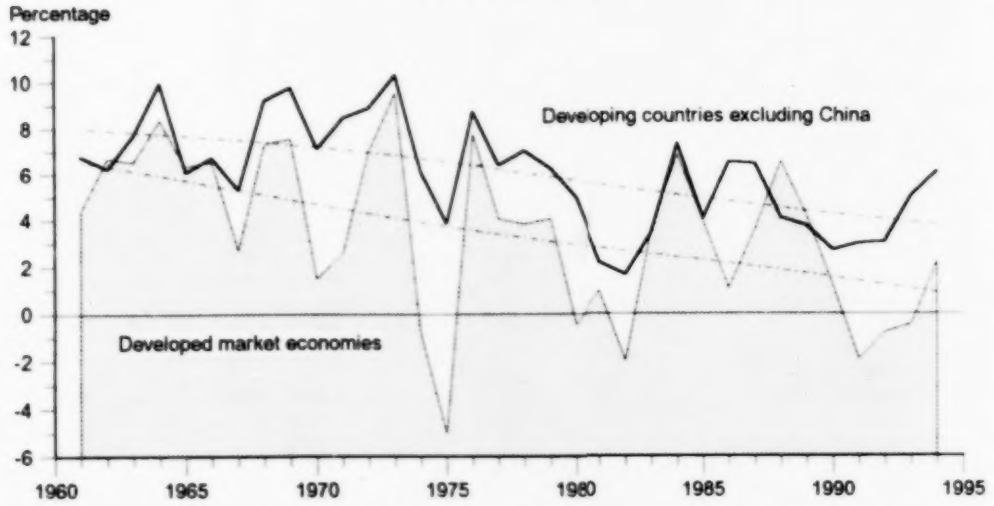
Note: Calculations are based on 1980 United States dollars.
* Least developed country.

Figure 1. Growth rates of GDP and MVA in developed and developing regions, 1961-1994

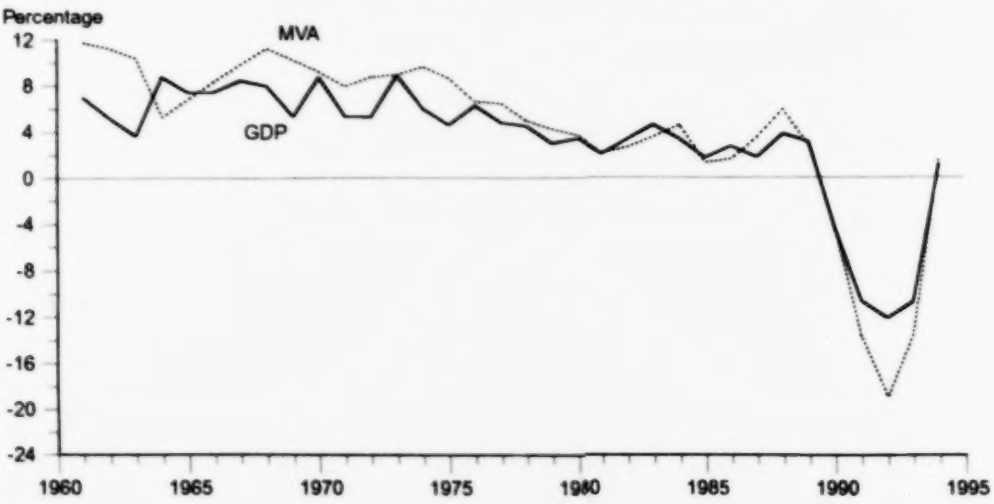
Gross domestic product



Manufacturing value added



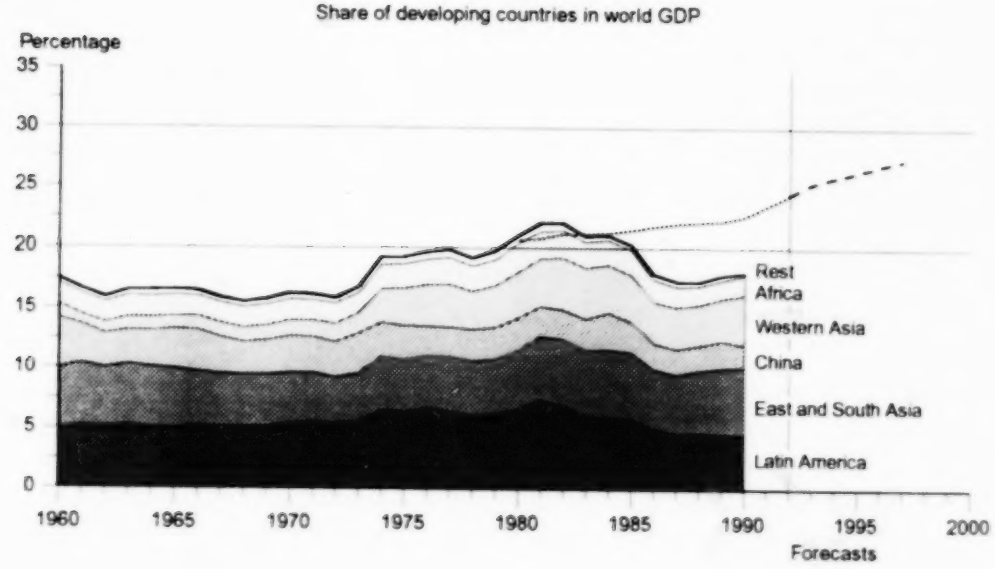
Growth rates of GDP and MVA in Eastern Europe and former USSR

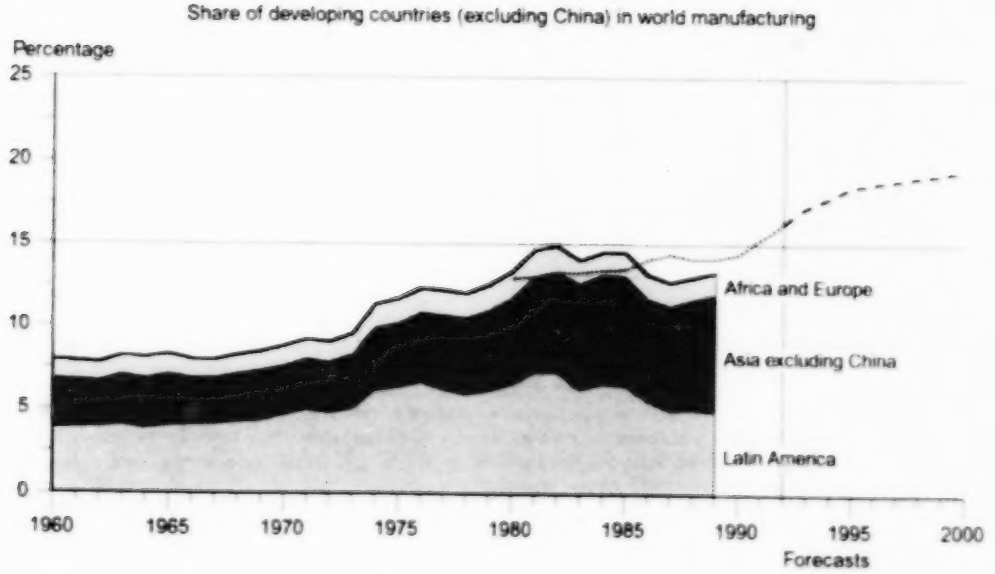


Note: Growth rates are computed using GDP and MVA data expressed in national currencies at 1980 prices and aggregated in terms of 1980 United States dollar exchange rates. The dashed lines show the long-term historical trend.

Source: United Nations National Accounts Statistics and UNIDO/PPD/PP/GLOBAL

Figure 2. Share of developing countries in world GDP and world manufacturing, 1960-2000





Note: Regional GDP and MVA shares are computed using national currency figures, which are aggregated in terms of United States dollars at current prices and exchange rates. The single dashed lines show the historical and projected world share of all developing countries for GDP and of all developing countries except China for MVA. They are computed using national currency figures expressed in 1980 prices and aggregated in terms of 1980 United States dollar exchange rates.

Source: United Nations National Accounts Statistics and UNIDO/PPD/IPP/GLOBAL

Table 2. Share of manufacturing value added of developing countries in world total in 1975, projected shares for 1990 and 1994 and growth rates 1975-1993
(Percentage)

ISIC	Industry	Share of developing countries in world total (excluding China)			Average annual growth rates			
					Developed market economies		Developing market economies	
		1975[a/]	Projected 1990	Projected 1994	1975-1985	1985-1993	1975-1985	1985-1993
3	Manufacturing	11.7	14.5	17.8	2.0	1.4	4.8	2.8
311	Food manufacturing	14.8	16.5	19.0	1.7	1.8	3.3	0.7
313	Beverages	19.8	23.9	27.6	0.8	1.6	2.8	2.8
314	Tobacco manufactures	32.9	35.0	37.2	1.5	3.5	3.6	3.4
321	Textiles	18.9	27.8	33.8	-0.4	-0.5	2.9	1.1
322	Wearing apparel	11.9	21.7	27.0	-0.4	-0.3	4.7	3.1
323	Leather and fur products	18.2	36.9	47.7	-1.2	-1.8	4.5	4.2
324	Footwear, excluding rubber or plastic	18.8	28.4	32.8	-0.5	-3.6	4.5	-1.5
331	Wood and cork products	12.6	12.5	15.1	-0.1	0.5	1.4	0.8
332	Furniture and fixtures	10.2	10.1	12.0	0.8	2.0	2.9	2.6
341	Paper and paper products	10.2	11.5	13.4	1.6	2.3	4.8	2.8
342	Printing and publishing	8.8	6.9	8.2	3.7	2.4	2.3	4.2
351	Industrial chemicals	9.6	12.6	16.2	1.4	2.7	6.9	2.5
352	Other chemical products	15.9	15.1	16.9	3.7	3.5	5.9	1.7
353	Petroleum refineries	24.7	38.5	45.1	0.9	0.6	6.8	3.3
354	Miscellaneous petroleum and coal products	5.8	15.3	21.2	1.0	2.2	11.8	0.9
355	Rubber products	13.4	21.2	26.8	1.0	0.3	5.7	3.7
356	Plastic products n.e.c.	13.7	13.4	15.1	5.6	3.9	7.3	3.7
361	Pottery, china and earthenware	14.1	20.5	27.5	-0.6	-0.1	5.9	1.6
362	Glass and glass products	11.5	14.2	17.9	1.5	1.2	3.5	3.9
369	Other non-metallic mineral products	14.2	20.4	27.4	0.5	0.9	3.4	4.4
371	Iron and steel	10.1	19.5	26.2	-1.8	-0.8	5.9	2.9
372	Non-ferrous metals	10.0	16.8	22.3	1.0	1.2	6.8	4.6
381	Metal products excluding machinery	9.8	10.8	13.8	1.2	1.4	3.8	3.2
382	Non-electrical machinery	5.1	5.8	7.6	2.7	0.8	4.9	2.2
383	Electrical machinery	8.2	12.4	15.5	4.8	0.6	7.3	5.9
384	Transport equipment	7.7	9.6	12.2	2.9	0.9	5.3	3.8
385	Professional and scientific goods	2.7	4.9	6.3	2.9	3.9	8.8	6.3
390	Other manufactures	9.8	17.4	22.9	1.0	1.3	6.2	4.5

Sources: UNIDO.

Notes: MVA growth rates are based on deflated national currencies converted to 1990 United States dollars. Growth rates are derived from 113 samples countries - 25 developed and 88 developing (industrial statistics consolidated by UNIDO).

ISIC = International Standard Industrial Classification of all Economic Activities (Revision 2).

[a/] This share calculation is based on 1975 prices and exchange rates, other years are in 1980 dollars. China and other Asian centrally planned economies are not included in the sample (their share in the world total is estimated to have amounted to 2.2 per cent in 1990 for total manufacturing).

share of the developing countries in world MVA is the plunge in MVA in the countries of Eastern Europe and the former Soviet Union (see figure 1).

3. The difficulty associated with the 1993 projection exercise stems from the output behaviour in the more advanced economies where the historical pattern seems to have changed. By past standards, the economy of the United States should have had a much stronger recovery in 1992 than the actual rate of 2.1 per cent, and it is likely that 1993 will be another lacklustre year. The year 1993 marks year one of the vaunted single market of the European Community (EC). The hopes and threats of an economically unified Europe, often translated and transcribed in the economic calculations for the growth of the world as a whole, seem to have disappeared amid the continent's worst recession for two decades. Indeed the current economic slump in Europe is shaking the very foundations of European integration. A new set of projections based on some intermediate politico-economic arrangement might produce a completely different picture. Even the UNIDO projection involving Japanese output performance is no exception. Japan is undergoing a rapid economic deceleration in spite of the pump-priming efforts of the Government - the tested and proven remedy in the past, but here too major uncertainty makes the timing of recovery more tentative than is conventionally the case.

4. The uncertainty surrounding the growth performance of these major economies has a direct bearing on the growth prospects of developing countries. UNIDO is, however, convinced that the GDP growth rate for developing countries as a whole (excluding China) will improve by nearly a half percentage point to 4.4 per cent in 1994 as shown in figure 1. MVA growth should reach 6 per cent in that year, from 5 per cent in 1993.

5. Thus paradoxically, the economic prospects for developing countries seem much brighter in the 1990s than during the 1980s. The World Bank is forecasting a surge in the growth rates of developing countries over the next 10 years. It projected annual growth rates of 4.7 per cent for the coming decade for developing countries as a whole, compared with the rate of 2.7 per cent achieved between 1982 and 1992. On the assumption that GDP per capita will grow at a slower pace, but still at 2.9 per cent per year, the Bank is confidently predicting the elimination of mass poverty in developing countries by year 2002. UNIDO projections, which are essentially of a short- to medium-term nature, bear out this general optimism. The five-year UNIDO projection puts the growth rate for developing countries, excluding China, at 4.4 per cent per year. China, which is always treated separately in the UNIDO projection exercises, is however expected to average 8 per cent GDP growth over the next five years.

6. As pointed out in previous issues of the UNIDO Global Report, developing countries have learned to insulate their economies more effectively from adverse external forces, and to rely more on their internal resources and domestic or intraregional markets. This means that the economic relationship between developed and developing countries is no longer strictly quantitative. What concerns developing countries most nowadays is the macroeconomic environment under which the global economy functions. It is the qualitative changes in the global financial and trading regimes which affect developing countries the most, and to a large extent, these changes are brought about by policies of major developed countries. In this context, UNIDO paid particular attention in preparing its medium-term projections to the probable impact of the new United States economic initiative, especially relating to its fiscal and trade policies.

B. Economic leadership of the United States

7. One of the changes which will affect the world economy in the 1990s is the would-be strong United States economic leadership. For the first time in decades, the United States is focusing its international policy not on global security, but on global economic growth. The immediate concern of the United States is, for sure, its domestic economy, specifically the problem of job creation. However, the effort to revitalize the United States economy would not only eliminate some of the basic global economic imbalances, but will bring with it new United States policy initiatives on international economic dealings and trade arrangements. A new global economic order based on realpolitik of national economic self-interest might sound ominous. Yet, after a decade of directionless expansion based on an equally disoriented international competition, the world might welcome strong leadership - this time around, in international economics as was the case in geopolitics. Already the direction of United States policy is quite plain to see. It actually intends to reduce its fiscal deficit, which has become a burden to the world as well as to the United States. Narrow though his victories were in the House of Representatives and the Senate, the President succeeded in getting legislative approval for a deficit reduction package - tax increases and expenditure reductions - of $496 billion over the next five years. The deficit reduction will lower interest rates, domestically and internationally, and encourage investment, which is essential for growth.

8. In the past three years, when the major developed countries were taking turns going through one of the worst economic recessions, developing countries remained largely unscathed, maintaining an average 3.2 per cent overall growth rate. Such a feat is all the more impressive when it is considered that the EC countries, working together, were scarcely able to achieve such a high joint growth rate even during the most prosperous years of the 1980s. Investors were quick enough to notice and exploit such a disparity in performance. The past three years have witnessed an unprecedented increase in private investment flows to developing countries. This sudden transformation of investor confidence reflects the often painful economic reforms undertaken by developing countries in recent years, under which trade and financial rules have been liberalized, public finances brought under control, unprofitable State enterprises sold off, and State control in industry and commerce reduced. But, the "push" effect of the low interest rates in the United States has helped a great deal as well. The success of the new United States administration in lowering long-term interest rates provides a genuine opportunity for growth in the United States and for the rest of the world.

9. The most significant change for developing countries in recent years has been, however, their willingness to experiment with an open economy. Developing countries, with their fragile industrial bases and fear of foreign economic influences, have always felt infinitely more comfortable with an insulated and closed economy. Decisions to eliminate tariff barriers to expose domestic industries to international competition and to allow free capital movements across borders to encourage foreign direct investment signal the end of self-imposed isolation by these countries.

C. Prolongation of the economic downturn

10. Although growth has picked up in the United States, the outlook for Japan and Europe has deteriorated, making economic recovery in the United States much weaker. A generalized economic recovery in the more advanced developed countries, and thus for the world as a whole, therefore remains even more elusive, and fears of the global economy sliding backwards into an even longer recession is prompting many international organizations to revise downward their original growth forecasts. The prolongation of the global economic downturn after 1991 is evidently due to the staggered nature of the current recession - each major developed country undergoing recession within a staggered time-frame. There are, however, indications that the current recessions will require much more than a quick restoration of consumer confidence in each country. For one thing, growth in real income in most major developed countries has been so low and for so long (see figure 1), that both the national savings and investment ratios have been sliding down, undermining the strength of recovery and future growth prospects. But, more importantly, the long slow growth has deprived these countries of the essential ability to implement structural adjustments without inviting in turn a major economic downturn. In the meantime, Governments in many of the countries have been effectively deprived of the use of fiscal and monetary policies to counter these recessions. Today, for instance, no major developed country, excluding Japan, is in a position to raise the aggregate level of demand through public spending. In a capitalist economy, an occasional recession is unavoidable, with the public being accustomed to government action to steer the economy out of recession. The public would surely become extremely wary if it realized that the economy was rudderless, or even steered with the wrong rudder, in the midst of recession: witness the recent sweeping phenomenon of corporate "downsizing" or "re-engineering" in the more advanced developed countries, which has promised to create millions of job redundancies in the name of enhancing international corporate competitiveness.

11. The prolongation of the current recession is therefore due to a generally lowered expectation for future growth held by both consumers and businesses in the more advanced developed countries, and to the fact that the same consumers and businesses are left to seek a "market solution" for their own problems as well as that of a global recession.

D. Lower interest rates and economic growth

12. In the name of controlling inflation, the world in the 1980s paid a steep price in growth and development. Not only did the average growth rate for the world as a whole drop, but the strain of having to cope with various problems of structural adjustment internally and between countries in a slow-paced global economy became quite unbearable. In many countries, the combination of slow growth and high real interest rates effectively discouraged investment in the real production sectors and production-related infrastructure, and encouraged financial speculation. The excesses of the 1980s led also to the ballooning of real estate prices, while the prices for manufactured goods and primary products kept easing domestically and externally. In both developed and developing countries, real wages generally failed to improve. Employment in developing countries increased steadily, but real wages declined continuously. In developed countries, however, the progress in productivity led to unemployment rather than to higher wages and income as capital share increased. With real income stagnant, developed countries have become increasingly protectionist, not only against cheap imports from low-wage developing countries, but against imports from one another. Foreign direct investment, used as a newly discovered instrument to circumvent actual and imagined trade barriers, inevitably resulted in duplicated production facilities all over the world, and caused excess world capacity, especially in the steel, automobile and electronics industries. In the meantime, more and more Governments kept becoming large debtors themselves, and by the time recession commenced, they were powerless and could not contain it.

13. Currently, inflation in the major developed countries remains at a modest 2 to 4 per cent per year. By August 1993, lower inflation expectations in the United States and the deficit reduction plan had pushed the yield on a 30-year United States Treasury bond to 6.2 per cent, down from 8.6 per cent in 1990, and 7.69 per cent in early November 1992. Given the 3.1 per cent consumer price increase observed in the second quarter of 1993, real interest rates in the United States have finally dropped below 3.5 per cent, and closer to the GDP growth of 2.3 per cent forecast by UNIDO for the United States in 1993. Thus for the first time in more than a decade, interest rate premiums on long-term industrial investment need not be double or triple the rates of return which the economy as a whole is capable of producing.

14. The successful lowering of long-term interest rates in the United States broke the international log-jam which had kept global interest rates so high for so long. It might have been genuinely the case that a belated realization by Germany of the seriousness of its own economic recession prompted its interest rate cuts. However, the decision to lower the German interest rate would have been impossible in the absence of the precedent set by the United States, especially without endangering the international standing of the deutsche mark. Most EC countries saw the need to lower their interest rates in the face of the worst recession since the 1930s but were constrained from doing so by the parity provisions of the exchange rate mechanism (ERM) of the European Monetary System. However in September 1992 Italy and the United Kingdom of Great Britain and Northern Ireland, were forced by the international financial markets to exit from ERM; consequently, their currencies were devalued and

their interest rates significantly lowered. As a result, signs of an end to recession and an economic turnaround, had by mid-1993 become clear in the United Kingdom. The financial markets continued pressure on the remaining members of ERM, with the result that by the end of July 1993 this pressure became almost unbearable, and ERM itself all but collapsed. It had become increasingly clear to the international financial markets during July 1993 that attempts to maintain some currencies, such as the French franc, within the prescribed parities of the unreformed ERM, were reminiscent of the linking of various major currencies in the 1930s to the Gold Standard, and similar economic damage was occurring. At the beginning of August 1993, the consensus in the markets was that almost all remaining countries of the ERM would reduce interest rates in a matter of weeks. As and when this occurs, EC countries will see their recessions coming to an end and a gradual return to growth.

15. During the same period, the share of United States dollar-based international lending soared from 60 per cent of all lending in 1990 to 86 per cent in 1991, and well over 90 per cent in 1992. The share of European currencies with relatively high interest rates fell sharply: the pound sterling, which made up 17 per cent of loans in 1990, contracted to a tiny 3 per cent, and Deutsche-mark-based lending, which constituted 4 per cent of international loans in 1990, almost disappeared by 1991. Yen-based loans, which made up 7 per cent of international lending in 1987, disappeared almost completely by 1991, however, for different reasons. Lower interest rates in the United States, therefore, had the effect both of halting finally and reversing the past trend of international interest rate hikes, and of providing the international community with a much-needed, single reference currency with a single reference interest rate. Since exchange rate risks are an important component of the overall cost of international capital, this was also a positive development for capital-importing developing countries. Many economists believe that declining interest rates could add 0.5 to 1 percentage point to United States economic growth in 1993. The impact on developing countries, especially to those with high external debts, could be considerably greater.

F. Prospect of trade diversion and global industrial realignment

16. Managed trade, in one version or another, looms large on the global scene: it is the spectre at the never-ending negotiations on the Uruguay Round of global trade talks. One reason why free trade had a rough ride in recent years stems from the persistently high unemployment figures observed in the more advanced developed countries. When the global economy is poised for an upswing, protectionist sentiment subsides and trade expands. This time around, however, some countries are determined to keep whatever fragile growth stimulus they have found or generated for themselves - to expand domestic output, and not to disperse it on imports. The United States, which bailed out the world economy in 1981 by opening the floodgate to foreign imports, is far less inclined this time to play the same locomotive role. Unlike in 1981-1982, the United States economic recovery starts with a large trade deficit and high unemployment. A fall in United States unemployment to 7.1 per cent in January 1993 indicated that the 4.8 per cent economic growth rate of the fourth quarter of 1992 was beginning to dent the high unemployment figures. The 106,000 newly created non-farm jobs constituted, however, only a third to a half of the monthly increase registered in previous recoveries. Manufacturing employment increased by 50,000 in the fourth quarter of 1992 to 1.75 million. But this was pale in comparison to the 200,000 manufacturing job losses registered in the third quarter of 1992 alone. On the other hand, the strong United States showing in the fourth quarter of 1992 has brought about a surge of imports.

17. Notwithstanding the diplomatic success of President Clinton at the Tokyo summit, held in July 1993, of the Group of Seven major industrialized countries and the optimism generated for a not-unsatisfactory completion of the Uruguay Round of talks under the General Agreement on Tariffs and Trade (GATT), the very significant change of Government in Japan in August 1993 adds a new element of uncertainty. The uncertainty may arise out of new differences of policy vis-à-vis Japan's major partners regarding development cooperation, trade and interest and exchange rates.

18. The United States currently runs a substantial trade surplus with the EC countries, postponing the need for a detailed sector-by-sector examination of United States trade with EC for the time being. The consequence of this surplus is that the main focus of the new United States trade policy has been directed towards Japan, China and other East and South-East Asian countries. The huge United States trade deficit with Japan has become a perennial problem for both countries and even for the world economy as a whole. In principle, bilateral trade imbalances, no matter how serious they might be, would be accepted by countries if their combined aim was to create a genuinely free multilateral trade system for the whole world. Japan has been underlining its traditional stand for a globally integrated, against a regionally based, trade system, and "rule-based", against "results-oriented", trade policies - the approach the United States intends to use to pry open Japanese markets. Japan's advocacy of adherence to free market and free trade principles is based on more than just pure ideology. Japan imports raw materials and exports finished products, which requires a multilateral global system of trade balances as a basic precondition. With only a difference in degree, the situation is common to all countries, including the United States. However, for the time being, the world is definitely headed for a heterogeneous trade balance and multilayer clearance system, in which the trade surplus of Japan vis-à-vis the United States in particular is expected to decline.

19. In 1993, China is expected to become one of the "top 10" exporting countries in the world. The extraordinary export growth of China, especially vis-à-vis the United States, has placed the China-United States trade relationship in a much similar situation to the Japan-United States trade relationship. While the United States is demanding trade liberalization from China and

improved access to its markets, China still sees early GATT membership as one way of dealing with bilateral pressures from its main trade partners including the United States. In sharp contrast, most of the East and South-East Asian countries, long accused of trade malpractices, have gone ahead by diverting their trade from the United States and focusing increasingly on their own geographic region. Intraregional trade among the Asian countries has been growing since the mid-1980s. The pace has, however, accelerated since 1989, when the United States growth rate started declining, and with it the build-up of pressure by the United States to reduce their bilateral trade surpluses. In 1992, of the $487.7 billion combined export figure of nine Asian developing economies, 1/ $144.5 billion or fully 30 per cent of it consisted of exports to each other, while $105.3 billion or less than 22 per cent of their combined exports went to the United States. In contrast, the United States used to provide 31 to 33 per cent of the total export market share for these Asian countries at a crucial stage of their export-driven industrial development during the 1980s. The need for growing South-South trade argued in Global Report 1985 2/ seems to have been recognized in practice at last.

20. Nevertheless, one consequence has been that the United States has been running declining, but persistent, bilateral trade deficits with most of the East and South-East Asian developing economies. These deficits combined stood at $31 billion or almost 47 per cent of total United States global trade deficits in 1991. With the exception of China, these economies have been running deficits with Japan, amounting to $32.5 billion in 1991 and equal to just under a third of the global trade surpluses of Japan in that year. Quite clearly industrialization in the developing Pacific Rim countries has changed the pattern of trade and investment flows among countries in the region. Figure 3 is a simplified sketch of how the pattern of trade and investment among some of the Pacific Rim countries has changed from around 1980 to the present, and how it seems likely to evolve during the rest of the decade. Figure 3 shows the strategic role that Asian countries have been assigned and have come to play so effectively in the triangular industrial relationship of production, specialization and trade with the United States and Japan. This industrial relationship, in as much as it has been mostly uni-directional in product flow, has been aberrational. It also had its ultimate limit in the willingness of the United States to accommodate it. The message is now clear, or has been for some time, that the limit has indeed been breached.

21. Even when the United States trade balance becomes lopsidedly favourable, overconcern for domestic employment persists. United States exports to Mexico have grown from $12 billion in 1986, when Mexico began reducing tariffs, to $44 billion in 1992. The North American Free Trade Agreement (NAFTA) will eliminate tariffs on most trade between the United States, Canada and Mexico, creating the world's biggest trading bloc. With a host of young, well-trained workers willing to work for $60 a week, Mexico provides the United States and Canada with a practicable alternative to the triangular industrial relationship and the production arrangement involving the South-East Asian countries as shown in figure 3. Access to cheaper labour is, however, not a priority goal of the United States for the time being. All the same, there is the danger of repeating the mistakes made by Germany in its transition after reunification, where wages in the eastern portion were artificially increased and the environmental and labour standards drastically raised before the pool of relatively cheap labour could effectively be absorbed and utilized for the benefit of all. This being said, it is still no more than a question of time before NAFTA, in one version or another, or even in its expanded version including other Latin American countries, is expected to come to pass.

G. Income gap between developed and developing countries

22. Many developing countries possess an absolute advantage in cheap labour; and with increasing mobility of capital, the cost of capital tends to converge world-wide. If prices of traded goods were equal everywhere, then wages and income in each country should converge. Thus, the idea that poorer countries with low wage labour should catch up on richer ones through trade is as old as the theory of international trade itself. That convergence in income has somehow failed to take place between developed and developing countries - having mainly occurred among developed countries up to now - is usually taken as an indictment against the existing system of global trade. If this were indeed the case, there are several possible explanations for it. For instance, either the developing countries do not really possess cheap labour or the prices of traded goods are not equal everywhere, or perhaps such convergence takes much longer than the economic theorists have foreseen.

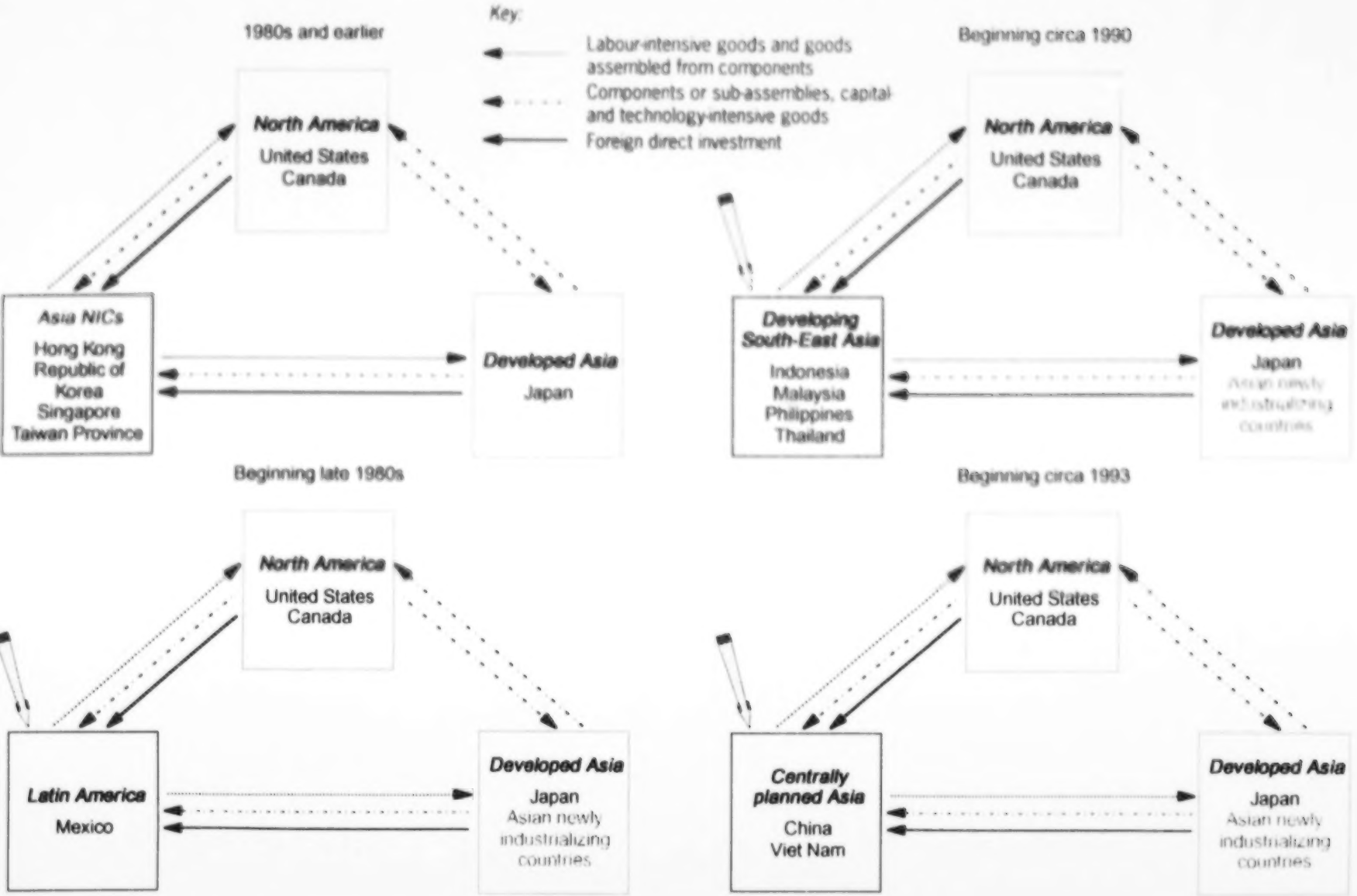
23. Another possible explanation relates to the two-layer structure of price determination involving developing-country exports. Producers of exports in developing countries compete essentially among themselves within a narrow margin assigned by the vertical chain of price determination dominated by distribution and marketing costs. The pursuit of high value-added content through production has its ultimate limit in factory-gate prices. Developing countries should realize sooner rather than later that industrialization under globally linked production and trade entails expertise not only in production but also in finance, marketing, shipping and trading. In a way, the existing income gap between developed and developing countries is more apparent than real. In a recent issue of its World Economic Outlook, the International Monetary Fund (IMF) used purchasing-power parities, rather

---

1/ Including China, Hong Kong, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan Province and Thailand.

2/ Chapters III and IV.

Figure 3. Changing partners and changing roles in the Pacific Rim trade and investment triangle: 1980-2000



than market exchange rates, to recompute GDPs. 3/ The result is a sharp increase in the developing-country share of world GDP from 18 per cent to 34 per cent. By contrast, the share of developed countries dropped from 73 to 54 per cent. This is clearly due to the enormous price spread between developed and developing countries - a spread reflecting the value added in the service industries, including trading. Moreover, there is also overwhelming evidence that those developing economies which climbed the income ladder rather quickly happened to be all active traders (two of them, Hong Kong and Singapore, incidentally joined the exclusive club of developed countries in 1993, according to the World Bank). In contrast, many African countries do not trade extensively, and whatever is traded is mainly through international trading agents.

24. Up to half a century ago, industrialization provided the base for trade expansion. In modern days, however, industrialization has always been preceded by the opening up of new trading opportunities. The Asian newly industrializing countries (NICs) clearly provide an example of a rapid take-off in the mid-1950s based on export-led industrialization, as did China in the 1980s. "Trade rather than aid" is the urgent appeal from the countries of Eastern Europe and the former Soviet Union, anxious to restart their interrupted industrialization process. The importance attached to trade by these countries clearly reflects the fact that the essence of industrialization for developing countries today consists as much in an enhanced production capability of traditional and domestic goods, as in the acquisition of know-how in technology, design, manufacture and marketing at all levels of distribution for new products which are demanded by the world at large.

II. INDUSTRIAL PERFORMANCE AND PROSPECTS IN THE MAJOR REGIONS

25. Several general factors are driving overall change in the global industrial economy. One is that technological change has perhaps never been greater than at present; advances in computers and electronics in particular are rapidly lowering costs of communication, information and control. Liberal, market-based economic policies have spread to all corners of the globe, allowing greater scope for the private sector. Industrial enterprises are being forced to restructure in terms of production platforms, management, employment, finance and linkages among themselves, merely to remain competitive in a world where large profits one day can vanish the next.

26. But short-term regional differences seem as great as the common factors. The current performance of both Western Europe and Eastern Europe, including the new States that emerged from the breakup of the former Soviet Union, is disappointing. In the latter region, the introduction of market-based economic structures has proved much more difficult than had originally been hoped for. Although great changes are under way and much has been achieved, industrial decline continues in 1993 for all but a few countries in this region. In Western Europe, prospects have been sharply downgraded since about the third quarter of 1992, when doubts arose about approval of the Treaty on European Union (the Maastricht Treaty), the exchange rate mechanism partly broke down, and the high costs of German reunification, especially in terms of inflation and the budget, became apparent. In August 1993, continued uncertainties brought about the effective discontinuance of ERM, at least temporarily. The expected positive impact of the introduction of the single European market in January 1993 seems hardly noticed.

27. In early 1993 it seemed that North America was emerging from recession and would be able to take over as "world locomotive" as Western Europe, and Germany in particular, went into decline. But recovery in North America has remained weak, as the new United States administration attempts to implement new policies. A compromise budget package was passed by Congress in the third quarter, but its impact is still not clear. Recovery in Japan, which was expected to be fuelled by fiscal stimulus, has so far also remained weak, especially since recent strengthening of the yen has reduced export competitiveness. Thus none of the major economic actors have been able to provide much push for the global economy, which is particularly worrisome in view of the continuing failure to reach final agreement on the GATT Uruguay Round of trade negotiations.

28. Short-term prospects for the developing regions are far better, particularly for the East and South-East Asian region, which continues to benefit greatly from a strong nexus of industrial trade and investment ties within the region and between the region and Japan, and now including China. Low-cost labour only partly explains this growth phenomenon. Sound macroeconomic policies have encouraged investment, rapid technological change and expansion of manufactured exports. Similar policies were adopted in the 1980s in much of Latin America and the Caribbean in the wake of the debt crisis, and more recently in India, and manufacturing output and exports are responding. Even in tropical Africa, subject to so many disadvantages, the small manufacturing sector is expected to grow at about 3 per cent annually in the period 1993-1994. Projected regional growth rates are given in table 1.

29. Regional shares in 1993 in world MVA, for total and individual industrial sectors, show that by far the biggest changes in the distribution of the total, compared to 1975 distribution, are the increase in the share of Japan to 16.6 per cent

---

3/ The use of purchasing-power parities to compare living standards in different countries has drawbacks as serious as the use of exchange rates. Living standards or even the level of income should be measured by the availability of choices in, as well as the affordability of, a vast range of goods and services. A pound of beef in a supermarket displaying 3,000 other well-packaged food items is different from the same offered by a street vendor. Income measured by price differentials on a few strictly selected items available to all countries including the poorest necessarily ignores the choice aspect, which is, after all, the main ingredient of high income. (See Global Report 1990/91 for a more detailed discussion on this subject.)

and the sharp drop of Eastern Europe and the former Soviet Union to 7.0 per cent. The share of North America increased slightly, to 28.3 per cent, and that of Western Europe remained unchanged at 31.3 per cent. Thus despite rapid growth in East and South-East Asia, the three most developed regions continue to account for more than three quarters of world MVA, largely due to the continual dominance of these regions in the capital- and technology-intensive sectors, such as machinery, electronics, transport equipment and chemicals, which constitute the bulk of world manufacturing. Over the period 1980 to 1993, the highest MVA growth rates were achieved by China (10.7 per cent), South and South-East Asia (8.2 per cent), Indian subcontinent (5.6 per cent) and North Africa and Western Asia (4.5 per cent) and the lowest by Eastern Europe and the former Soviet Union (-1.8 per cent) and Latin America and the Caribbean (-0.1 per cent). The industrial outlook for the three most developed regions - North America, Japan and Western Europe - is examined below. The companion paper on international economic change and the industrial development of the developing countries (GC.5/15) provides an extensive discussion of the five developing regions, plus China and Eastern Europe and the former Soviet Union.

A. North America

1. Short-run outlook

30. In North America GDP grew by 2.0 per cent in 1992, following a 1.2 per cent decline in 1991. According to the UNIDO forecast, the recovery will continue through 1994, with GDP growth of 2.4 and 3.0 per cent in 1993 and 1994 respectively. The recovery has been less robust than that following most other recessions since the Second World War, in part because the recession itself was mild. The need to raise taxes and check spending to trim the federal deficit has also retarded the recovery. The new United States administration has won approval of a budget plan to significantly reduce the budget deficit, by up to $100 billion per year over the next five years. Canada too has put in place a combination of spending cuts and tax increases to reduce its budget deficit.

31. The progress of recovery in the United States has been uneven. The recession ended in a technical sense when GDP growth turned positive in the second quarter of 1991. But growth during the remainder of 1991 remained low, and the result for the year was a 1.2 decline in GDP. Growth remained low in the first half of 1992, before rising to 3.4 per cent in the third quarter and 4.8 per cent in the final quarter. It then fell to 0.7 per cent in the first quarter of 1993. While growth appears to have recovered somewhat at mid-year, the recession in Europe and low growth in Japan will affect the recovery in the United States.

32. The growth of MVA in the United States improved from -2.2 per cent in 1991 to 3.1 per cent in 1992. In Canada it increased from -6.6 per cent in 1991 to 0.5 per cent in 1992. Two problems that the manufacturing sector in the United States will have to overcome in 1993 and for the next few years are cut-backs in defence spending and a slow-down in the growth of exports. Export growth will slow as a result of the slow-down in growth in the rest of the world in 1993. Exports of manufactured goods make up a little over half of total merchandise exports. Some 60 per cent of defence industry workers are engaged in manufacturing, and between 1992 and 1995, defence cuts will result in some 250,000 net jobs lost per year. During 1993, the fall-off in exports may be the more serious problem. The NAFTA treaty, which would eliminate most trade barriers between Canada, United States and Mexico, would provide an impetus to exports, but its ratification by the end of 1993 is still uncertain.

2. Longer-term prospects

(a) Cutbacks in defence spending

33. Cuts in defence spending will result in dislocations in United States industry for the next five years. Defence spending cuts are like any other structural adjustment, which requires time and a certain amount of economic resilience for resources to be transferred to other productive activities. Adjustment is apt to be slow, however, because of the magnitude of the decline and the fact that some of the resources used in the defence industry are specialized and not so easy to relocate to the civilian sector. For example, over the 10 years from 1986 to 1996, defence cuts will increase the supply of civilian aircraft assemblers by over 50 per cent and the supply of aeronautical and astronautical engineers by nearly a third. Some occupations are not limited to defence industries, and the effects of defence cut-backs may not have much impact. In the specialized occupations of aircraft assemblers and aeronautical and astronautical engineers the impact will be severe. Unless the non-defence aerospace industry greatly expands, workers who lose defence jobs in these occupations will have to embark on new careers. The losses run up by United States airlines over the last few years and the increased share of the civil aircraft market held by European builders do not bode well for an offsetting expansion of the United States aircraft industry. However, a more positive aspect of defence cut-backs, the peace dividend, should have both short- and long-term positive effects. In the case of both Canada and the United States the peace dividend has made it much easier to implement deficit reduction programmes and should make budget targets attainable. Lower long-term interest rates and increased investment may result.

(b) Productivity and manufacturing wages

34. During the 1970s and 1980s growth of business productivity in the United States lagged behind that in most other industrial countries, and well below the long-term trend for the United States. The service sector was particularly hard hit by the slow-down in productivity growth. But in the 1980s not only was productivity growth slow, but wages grew more slowly than productivity. One of various factors that have lowered productivity growth is the decline in the output share of manufacturing, which has consistently had a higher rate of productivity growth than the rest of the business sector. Accompanying the slow-down in productivity growth was an increase in wage dispersion both in the economy as a whole, as workers moved from manufacturing into services as well as within manufacturing. While the phenomenon of growing wage inequality is not new, it has accelerated over the last decade. One explanation for the phenomenon might be the

relative decline in the share of manufacturing in GDP, but manufacturing has also exhibited a declining demand for lower-skilled labour over the last three decades.

(c) North American Free Trade Agreement

35. Despite some popular opposition in all three countries, Canada, Mexico and the United States signed the North American Free Trade Agreement in December of 1992. NAFTA expands the free trade area consisting of Canada and the United States to include Mexico. If it is ratified by the legislatures of the three countries, it will take effect on 1 January 1994. At that time the three countries will remove most quantitative restrictions, such as quotas or import licensing requirements, on imports from the other NAFTA members. Some quantitative restrictions will be simply abandoned, while others will be converted to tariffs which will be eliminated over a period of 5 to 10 years in most cases. Since trade-weighted tariffs are already low between Mexico and the United States, the removal of non-tariff barriers will give trade an immediate boost. Mexican tariffs on goods imported from the United States are approximately 10 per cent on a trade-weighted basis, and the corresponding figure for the United States is about 4 per cent. Sectors where full implementation will stretch out over 10 to 15 years include some agricultural products, textiles, steel and financial services. "Side agreements" reached in 1993 pertain to worker conditions, environment and dispute mechanisms.

B. Japan

36. The Japanese economy appears to be following a path of gradual upward movement after the sharp decline in economic growth in 1992. The after-effects of the punctured bubbles of asset inflation distinguish this from earlier recoveries. Banks have become more careful in lending as a result of the mass of non-performing loans related to land and stock speculations. Consumers seem to have lost confidence, while enterprises have been hit by profit falls and uncertain sales prospects, and trade disputes with the United States and further yen appreciation cloud the near-term picture. Positive thrusts for growth however, are coming from strong export demand in the Asia-Pacific Basin, from signs of economic recovery in North America and from the government fiscal stimulation package. The stimulus package consists of $90 billion of additional government spending, mainly on infrastructure projects. Because government debt in Japan is low, the increase in spending is not likely to have any adverse effects on business or consumer confidence, as such deficit spending measures might have in many other Organisation for Economic Cooperation and Development countries. On the other hand, $90 billion is small in relation to the size of the Japanese economy, and is meant only to help initiate recovery and restore confidence. The Government is clearly relying on private investment as the main engine of growth. Intermediate and long-run prospects appear good, especially because of proven techno-industrial prowess in the capital goods and engineering-intensive sectors.

37. In 1992, GDP grew by only 0.8 per cent, compared with 4.4 per cent in 1991 and 5.2 per cent in 1990. A GDP growth rate of 1.1 per cent for 1993 and 2.5 per cent for 1994 is foreseen as likely. MVA declined sharply in 1992 (-6.2 per cent). The decline should slow in 1993 (-0.8 per cent), and growth of 1.8 per cent is expected in 1994. Led by industries such as electrical and non-electrical machinery, transport equipment and chemicals, MVA grew by an average of 3.6 per cent during the period from 1980 to 1990. During the period from 1990 to 1992, however, declines, averaging -0.9 per cent, were recorded in most industrial branches. Only 10 out of 28 industries achieved positive growth. During 1990-1992 the industries that experienced the sharpest declines in output were industrial chemicals (-7.7), leather and fur products (-6.5), wood and cork products (-5.2), glass and glass products (-5.4) and non-electrical machinery (-5.6). Partially offsetting declines in these industries were large increases in output in petroleum refining (27.8), miscellaneous petroleum and coal products (17.5) and tobacco manufactures (11.2) industries. All three of these industries are ones in which output declined during the 1980s. The share of MVA in Japanese GDP stopped growing as of 1991, and since then labour productivity and manufacturing employment have also fallen.

38. A medium-term (1992-1997) projection for annual growth in various industries indicates a return to higher growth. The leading industries include electrical machinery (5.4 per cent), general machinery (4.7 per cent), precision instruments (3.9 per cent), chemicals (3.6 per cent) etc., although transport equipment provides the exception (only 1.3 per cent).

39. The relatively weak recovery process indicates that the aggressive investment experienced from 1988 to 1990 is not likely to be repeated in the near future. It should be recalled that the economy recorded double-digit investment growth for plant and equipment for three years consecutively - namely, 16.3 per cent in 1988, 14.3 per cent in 1989 and 11.2 per cent in 1990. Then in 1991 the rate fell to 2.7 per cent followed by -4.6 per cent in 1992. According to a sample survey by the Kogyo Bank, the growth rate of investment for plant and equipment will continue to be negative in 1993. The collapse of asset prices in 1992 reduced the ability of enterprises to borrow on collateral. Excess production capacity and accumulated inventories coupled with sluggish consumer demand (1.2 per cent and 2.4 per cent growth estimated for 1992 and 1993, respectively) all tend to erase needs to add capacity. The ability of Japanese banks to provide investment finance has also weakened; average return on equity of major banks dropped from 9.9 per cent in 1990 to 5.9 per cent in 1991, and to 4.8 per cent in 1992.

C. Western Europe

1. Short-run outlook

40. Optimistic growth expectations for most of Western Europe were revised sharply downwards from mid-1992. In particular, Germany ceased to be the "engine of growth" for the region, and sudden troubles related to exchange rate coordination, including devaluation of many European currencies against the deutsche mark, created widespread market uncertainty. For most of the region, GDP growth ceased or became negative in 1993, and in the EC countries unemployment is expected to rise to about 12 per cent of the workforce.

Manufacturing has suffered more than service industries; even major companies are reporting sharply lower sales and profits.

41. Growth of regional GDP, 1.2 per cent in 1992, is expected to become negative in 1993, at -0.3 per cent. But for recovery in the United Kingdom after two years of declining GDP, the regional average in 1993 would be even worse. Starting with Germany, where GDP growth is expected to drop to -1.7 per cent in the western part of the country, economic slow-down spread swiftly throughout the region. However the recession is expected to be short-lived. Recovery is forecast for Western Europe in 1994, with GDP growth rising to 1.9 per cent on the assumption of lower inflation and interest rates, especially in Germany, and greater currency stability.

42. The share of manufacturing in regional GDP is continuing to decline. With MVA growth of -2.8 per cent forecast for 1993, Western Europe is expected to register its fourth consecutive year of declining MVA. Economic recovery forecast for 1994 is expected to boost regional MVA growth for the year to 1.1 per cent, still below that of GDP. High wages and non-wage benefits are apparently eroding industrial competitiveness in much of Western Europe. Major industries such as automobiles and electronics are suffering currently from high operating costs, so that companies are shedding labour and seeking lower-cost production sites. German automobile manufacturers, for example, are increasingly looking towards eastern European bases for the supply of parts and assembly. Small cars may soon be produced only in eastern or southern European countries. Wage differences, such as a 1:6 ratio between the Czech Republic and neighbouring Bavaria, are providing a strong incentive to relocate.

43. Germany nevertheless accounts for the largest share of regional manufacturing, 35 per cent as of 1990. France, the United Kingdom and Italy accounted together for another 39 per cent. Production of non-electrical and electrical machinery and transport equipment dominate regional manufacturing. Together these industries accounted for one third of 1990 regional MVA.

2. Delays in forming a single European market

44. Until about mid-1992, movement towards a greater European polity and economy within a few years did not seem in doubt. The Single European Act of 1987, which was designed to remove inconsistencies in economic and business regulations and practices within EC by the beginning of 1993, had been agreed. And the Maastricht Treaty, signed in early 1992, outlined a wide range of changes that would greatly strengthen efficient decision-making within EC, including a common currency (by 1999 at latest), convergent fiscal policy and EC-wide business law and regulations. Widening of EC, that is, adding new member countries, was also being negotiated. At mid-year, a referendum in Denmark went against the Treaty, reinforcing doubts in several EC countries about greater central authority, and leading to the chaotic changes in the EC exchange rate mechanism starting in September 1992 (several countries devalued or dropped out of ERM). The problem was exacerbated because the German Bundesbank decided that it could not lower interest rates because government spending on rehabilitation in the eastern part of Germany was threatening to cause higher inflation. Plans for a common European currency by 1999 now seemed optimistic at mid-1993, and continued pressures on the ERM threaten its existence. Meanwhile, in major countries such as Italy, France and the United Kingdom, as well as Germany, political pressures were weakening government policy options. As of writing, in France the presidency and the Government are once again divided along party lines, in Italy political corruption accusations have led to a complete reorganization of the system of Government, and in Germany the east-west problem, inflation and the budget deficit are pushing other issues aside in political debate.

3. Longer-term prospects

45. Once Western Europe has recovered from the economic shocks caused primarily by German unification and the negative outcome of the first Danish referendum on the Maastricht Treaty, and has reconstructed ERM, the delayed process of EC deepening and widening will help to bring the region back to a positive growth track. But prospects for manufacturing in the region are not particularly good. Too much of industrial production remains in "sunset" industries such as steel, innovation and productivity growth tends (with significant exceptions) to be lower than that of major competitors (especially those from East Asia), and labour costs are relatively high (for example, China now produces simple manufactures at a small fraction of Western European costs). One result of declining competitiveness has been that EC manufacturing exports to non-members, as a share in world manufacturing exports, has declined steadily from over 22 per cent in 1980 to under 18 per cent in 1992.

46. As mentioned earlier, the share of MVA in regional GDP has been declining. This trend should continue, with production involving low technology and low skills being encouraged to relocate to low-cost areas within the region or to Eastern Europe or to developing countries. The future of manufacturing in Western Europe needs to be based on carefully selected, lean, efficient production of high-technology products based on high-skill technologies, in other words, on the region's dynamic comparative advantages. A consequence of this prospect will be, unfortunately, that manufacturing will provide fewer jobs for unskilled labour; rapid growth in service industries will therefore be needed.

III. TRADE AND INDUSTRIALIZATION

47. This chapter focuses on the role of international trade in industrialization, and the extent to which the experience of the Asia-Pacific model of export-led industrialization is relevant to industrialization strategy in sub-Saharan Africa. The chapter concludes, inter alia, that trade can be a very powerful instrument of industrialization and economic development, provided that certain important preconditions are met. In particular, the Asia-Pacific model of export-led industrialization characterized by the export-linked secondary import substitution has

proven very effective in accelerating industrialization in the last two decades.

48. Emerging from the first phase of import substitution in the decades of the 1950s and 1960s, these countries shifted to the export drive in the decades of the 1970s and 1980s, initially concentrating on the natural resource-based or labour intensive products such as food processing, textile and garments, rubber products and electronic assembly. The competitive export industry is built on foreign technology often linked to foreign direct investment (FDI). The rapid increase in FDI is followed by a rapid increase in the imports of intermediate and capital goods from the supplier countries of FDI. As imports of intermediate and capital goods become essential for sustaining the export-led growth, these countries launched the second phase of import substitution strategy, this time focusing first on the domestic production of technologically less demanding intermediate goods and then on the technology-intensive capital goods through learning-by-doing and other policy measures of upgrading technological capacity. The second phase of import substitution has in turn broadened the industrial base, deepened domestic interindustry linkages, and improved technological capacity.

49. Empirical results obtained from an input-output analysis of the structure of trade and a decomposition analysis of the sources of the industrial growth in Asia-Pacific countries confirmed the primacy of manufactured exports in accelerating industrialization and the strategic importance of import capacity and its stability to sustain the export drive. Manufactured exports accounted for nearly 50 per cent of manufacturing output growth in Malaysia, 83 per cent in Singapore, 34 per cent in the Republic of Korea, 29 per cent in Thailand, 25 per cent in Japan, 21 per cent in the Philippines, 15 per cent in Indonesia and 12 per cent in the United States in the period 1975-1985.

50. It is widely accepted that certain prerequisites may have to be met before launching an export-oriented industrialization (EOI) strategy. First of all, industrial supply capabilities need to be built up, usually by providing a period of protection for so-called "infant industries" in the domestic market. Almost every successful exporter started with import substitution of light consumer goods. The rationale for the infant industry argument is that the period of protection is provided to increase technical efficiency and the competitive edge in the world market. Building blocks for industrial supply capabilities include many interrelated aspects of development that are not directly related to trade and precede the design of a policy framework for export promotion. For instance, the basic physical infrastructure - transport, communications, water, gas and electricity, etc. - is essential to manufacturing. On the intangible side, human capital accumulation and skill improvement through education and training along with the creation of an entrepreneurial class are equally, if not more, important. Closely related to human capital accumulation is a concomitant development and continuous upgrading of technological capacity to assimilate the latest technology, and to enhance product design capacity through institution building for science and technology. Institution building should also focus on the strengthening of administrative capacity along with a corps of competent technocrats.

51. In general, most of these basic building blocks for manufacturing capacity do not seem to exist in sub-Saharan Africa. The Asia-Pacific model of EOI strategy is simply not replicable at the early stages of industrialization in which sub-Saharan Africa finds itself today. It seems evident, therefore, that in sub-Saharan Africa, the role of manufactured exports as an instrument to push industrialization becomes less important than non-trade policy measures such as selective industrial targeting and nurturing of infant industries, agricultural development and rural industrialization, strengthening domestic linkages between agriculture and manufacturing, promoting infrastructure development and institution building. The relative efficacy of the EOI strategy may vary in time and place, depending on the initial conditions and the level of industrialization of a country in question. In sum, industrial productivity is an engine of growth and exports are a catalyst for industrial growth. Moreover, in recent years, foreign direct investment by transnational corporations has been increasing sharply to such an extent that total sales by transnational corporations outside their countries surpassed the total world exports. From the perspective of developing countries, foreign direct investment seems to matter equally, if not more, than trade as an instrument to accelerate industrialization.

52. Another important question raised in this chapter is the universality of free market and free trade principles across economies regardless of the level of industrialization, and social and economic conditions. Is "getting the prices right" the best policy for industrialization and development? Obviously, a correct price signal alone may not be sufficient to induce and sustain the growth of industrial output without adequate physical infrastructure and socio-economic institutions. Thus it is argued that the scope for state intervention seems to depend on the stages of industrialization. At the initial stages of industrialization, where there are no functioning markets, state intervention may be quite extensive. Public investment in infrastructure and institution-building has to be undertaken and industrial development guided, given the inability of the private sector to mobilize financial resources to undertake large investment. The scope for such intervention should diminish progressively while the market plays increasingly a greater role in guiding the process of industrialization as the industrial structure becomes mature and complex.

53. The question is not whether the state intervention <u>per se</u> is good or bad, what matters most is the nature and quality of intervention. The outcome of intervention will not only depend critically on the objective of intervention, for instance, inward- or outward-oriented industrialization, but also the capability of the state to initiate and guide structural transformation leading to the functioning of free markets. In the past, active policy interventions in the East Asian countries were targeted at the creation of competitive export industries and an outward-oriented economy <u>after</u> the initial phase

of import substitution. This transition was facilitated by the development of an efficient government bureaucracy which was capable of ajudicating between the competing demands of vested interest groups and disciplining various economic actors to implement technocratic policies. In many other developing countries, state intervention was equally active but often failed through misdirecting efforts towards unsustainable strategies such as inward-looking industrialization. Such failures were compounded by the problems of weak government capacity to pursue coherent policies.

54. Like market reforms, the impact of trade liberalization may also vary considerably from country to country, depending on the country's level of industrialization. For instance, for a small undiversified economy with a small manufacturing base, trade liberalization may soon become untenable because of a surge of imports leading to a foreign exchange crisis. In many cases it may be more rational to introduce import liberalization after domestic manufacturing capacity has sufficiently developed and a successful export drive launched. To be more specific, trade liberalization may be achieved in step with the progress of the export drive through a combination of time-phased relaxation of import controls, selective opening of domestic markets for foreign suppliers, rationalizing tariff structure, establishing realistic real exchange rates, more transparent effective protection via tariffs rather than quantitative restrictions, etc. In this manner, the foreign exchange squeeze can be avoided by growing export revenues paying for the imported inputs needed for increased exports of manufactures. Thus, a proper sequencing of policy reforms is critically important to the EOI strategy. Nevertheless, there is no universally applicable approach to the sequencing of policy reforms. The optimal design and sequence is country-specific and may vary considerably across countries, depending on the initial conditions, and especially the degree of political commitment to reforms and administrative capacity to implement reforms.

55. Despite considerable intercountry variations, the following broad boundary conditions for sequencing may be suggested. First, apart from the crucial importance of basic infrastructure, considerable manufacturing capacity must be developed before building an export base. At the same time, macroeconomic stabilization is essential to create a favourable macroeconomic environment for rapid industrial growth. In many cases, macroeconomic reforms should precede structural reforms including trade reforms. Moreover, import liberalization should be introduced well after the upsurge of manufactured exports. Finally the liberalization of financial and capital markets should be sequenced after trade reforms in order to gain some degree of control over international capital flows. This is essential in an orderly transition to an export-oriented economy and in maintaining stability in financial and capital markets.

56. For most countries of sub-Saharan Africa, the set of formidable external and internal constraints to industrialization that has to be overcome includes crushing debt burdens and crippled import capacity; the overwhelming dependence on commodity exports and a narrow specialization in a few commodity exports to a small number of countries, and the consequent instability and secular decline in export revenues and foreign exchange squeeze; infrastructure bottlenecks in areas such as transport, communications, water, gas, and electricity; acute shortages of managerial and entrepreneurial skills, and skilled labour; inadequate administrative capacity, weak technological capacity, and the embryonic development of economic and social institutions such as financial and capital markets, legal systems and other supporting technical services. Under these external and internal constraints, the strategy options open to sub-Saharan Africa seem to be very limited. The following points must be taken into account in formulating a viable strategy for industrial revitalization in sub-Saharan Africa.

(a) The onerous debt burdens of sub-Saharan Africa must be substantially alleviated. The debt overhang has caused a severe import compression of vital manufactured inputs and contributed to widespread capacity underutilization, thus nipping in the bud small manufacturing industries developed in this region;

(b) It must be recognized that the promotion of manufactured exports catering to world markets as a major vehicle for accelerating the pace of industrialization in this region is for the most part beyond the realm of feasibility for sub-Saharan Africa in the short and medium terms;

(c) Despite downward trends for commodity prices, sub-Saharan African countries have no other alternative but to expand traditional commodity exports to earn foreign exchange for industrial finance;

(d) Resource-based industrialization should be consistent with the operational and technological constraints of an economy. In this regard, the development or revitalization of agro-processing industries is to be encouraged, while mineral processing is to be postponed until such a time when a broad manufacturing base is firmly established, because of its high technological requirements, scale economies and capital intensiveness;

(e) In the light of rapidly growing FDI whose economic significance may soon equal that of trade, it is essential to seek actively FDI in light manufacturing for both import substitution and exports. Given the region's considerable competitive disadvantage in attracting private capital, concerted efforts must be made to find ways and means to channel part of ever-growing international FDI to this region through international cooperation, and particularly multilateral and bilateral technical and financial assistance, to create a favourable competitive environment for FDI from all sources including newly industrializing countries in East Asia and Latin America;

(f) Successful industrialization in sub-Saharan Africa will depend critically on other factors that are not directly related to trade such as the build-up of industrial supply capacity. In this context, the development of physical infrastructure and human capital, institution-building, rural industrialization and the strengthening of manufacturing linkages with agriculture, and with the rest of the economy is of paramount importance.

57. Although each export success story based on the selective interventionist approach, particularly in East Asian countries, has more to do with unique country experiences than general characteristics of trade policy and market reforms, some aspects of the Asia-Pacific experience may offer broad lessons for sub-Saharan African policy makers, including the following:

(a) Sub-Saharan African countries may gain some insight by examining carefully the transition phase of development from being an exporter of commodities to a exporter of manufactures, and particularly the strategy of nurturing light manufacturing under protection first and subsequently promoting its exports while sustaining traditional exports at the same time as certain Asia-Pacific developing countries such as Indonesia, Malaysia and Thailand have done;

(b) Almost all successful manufactured exporters started with import substitution of light manufacturing under protection. The key element in the infant industry argument is a relatively quick transition of protected industries producing for domestic markets to exports. Such transition in many Asia-Pacific countries was completed in a relatively short period of time. Many factors are responsible for such rapid transformation. It may be worth while for sub-Saharan African policy makers to examine carefully the Asia-Pacific experience in order to gain a better understanding of the political economy of protection;

(c) At the early stages of industrialization, and closely related to it, is the quality of state intervention. A high quality of state intervention is essential to structural transformation leading to the eventual functioning of market systems. In this regard, particularly early East Asian experience may provide valuable lessons, if carefully adapted to local conditions, for sub-Saharan African policy makers who endeavour to upgrade the quality and effectiveness of public administration and strengthen technocratic capacity to direct the overall economic transformation;

(d) Given the paucity of managerial and entrepreneurial skills coupled with relatively weak technological capacity in sub-Saharan Africa, foreign direct investment may be one effective way to build a manufacturing base for import substitution and exports. The Asia-Pacific experience may offer some useful lessons for sub-Saharan policy makers in this area;

(e) A wide array of export promotion measures and machineries developed in various Asia-Pacific countries may offer a broad menu from which to choose a set of export instruments suited to the needs and conditions of a specific country in sub-Saharan Africa;

(f) Finally, sub-Saharan Africa may benefit from a systematic comparative assessment of export-led industrialization strategies in general and the design and sequence of policy reforms in particular in various Asia-Pacific countries. However, great caution must be exercised in drawing lessons for sub-Saharan Africa from the Asia-Pacific region's dynamic industrial growth, particularly in view of enormous institutional variations across countries in terms of the political commitment to policy reforms and the organizational capacity to implement them.

IV. A SURVEY OF SELECTED MANUFACTURING INDUSTRIES

58. Thirteen comprehensive industry surveys are presented in the present chapter. Five of these analyse the primary processing industries. Included among food and wood processing are cocoa processing (ISIC 3119), seafood processing (ISIC 3114), and market pulp (ISIC 341101-34116). The mineral resource-based industries selected are copper processing (ISIC 3720041) and petrochemicals (ISIC 351103-351130, 35131). These are followed by surveys of intermediate goods industries with a high-technology content. Included are fine chemicals (parts of ISIC 3512, 3522, 351102), higher value-added steel (parts of ISIC 3710, 381904, and 381905), and advanced materials (part of ISIC 3513, 3610, 3620, 3710 and 3720). The remaining surveys deal with the important issue of financial and technological revitalization of capital goods industries. The industries covered are semiconductors (ISIC 383228), power-generating equipment (ISIC 3511), fertilizer equipment (ISIC 3822), industrial lift trucks (ISIC 3537), and numerically controlled machine tools (ISIC 3823).

59. In the primary processing industry, profitability and subsequent investment vary with the cyclical market conditions induced by changes in the industries requiring its output. This is particularly true of raw materials processors such as the market pulp and copper processing industries. Fluctuations in cocoa also depend on supply problems, and in seafood they vary with price and consumer taste. The petrochemical survey describes an industry that has forward linkages to other industries such as automobiles, other finished chemicals, clothing and housewares, while competing with other new materials such as synthetic or advanced materials, particularly as technology shifts.

60. In the case of intermediate industries, the production level depends not only on the derived demand for their outputs but also on the costs of their inputs. These industries are also critical for their forward and backward linkages to other industries in the overall economy. All the included industries also depend on technological advances to continue their growth. The survey of the fine chemicals industry reveals that it has very close forward linkages with the pharmaceutical, agricultural raw material and food industries. New types of chemicals have to be developed as the medical industry strives further to conquer traditional and new diseases. New chemicals are also needed as insect, fungus and weed varieties become hardier and more resistant. The higher value-added steel survey addresses new technological developments in this growing industry, and also suggests how environmental implications of steel production can be overcome with the new products. The survey of the advanced materials industry reveals the speed of technological change relating to factor inputs taking place in many industries. Advanced materials compete increasingly with steel, copper, wood and chemical products, including plastics, in many areas of product manufacturing. Finally, the survey of the semiconductor industry illustrates how quickly new technologies are advanced and applied. Of particular note is how quickly the Republic of Korea and Taiwan Province have been able to enter these high-technology domains.

61. Among the capital goods industries, the survey of power-generating equipment illustrates how large industries in the North cover the world markets; yet at the same time, it shows how such industries can operate to the benefit of the South. For instance, power-generating equipment firms are being asked to participate financially in private electricity-generating firms in developing countries. The surveys of fertilizer equipment and copper processing illustrate two industries whose future to a certain extent depends on progress in developing countries. The industrial lift-truck industry depends more on what is happening in the North, particularly as business conditions affect materials handling and transport. The numerically controlled machine tool and the semiconductor industries are technologically sophisticated and still dominated by developed countries in world production and trade. The development of these strategic industries poses a formidable challenge to developing countries. The Republic of Korea and Taiwan Province have already taken up the challenge.

62. The surveys vary in scope and depth depending on the availability of data, which are still incomplete and inadequate for certain industries, particularly those related to developing countries. Nevertheless, the findings seem to point to a number of common salient features, which are summarized below:

(a) Growth has levelled off in many industries, reflecting the gathering impact of the world recession in the latter part of 1992 and its continuation in 1993. In some of the resource-based industries, such as copper processing, capacity utilization has been high and stocks for certain products have become low. The steel industry has just gone through a period of retrenchment, and price levels are not yet sufficiently high to stimulate capacity expansion, yet some hope rests in the development of higher value-added steel products. In the case of fertilizers, demand increases have nudged prices upwards, with some new capacity additions pacing the fertilizer equipment industry. Likewise, the currently low level of capacity utilization coupled with environmental concerns in the petrochemicals industry suggests that no new capacity expansion will soon occur. In capital goods industries such as industrial lift trucks, sales in some countries are influenced by recession, while growth is occurring in the markets of other countries with growing manufacturing sectors;

(b) A growing trend towards less government intervention and more deregulation and privatization is discernible. One of the most noticeable changes is taking place in the power-generating industries, where a number of Governments are encouraging private electricity generation. In the steel industry, the privatization of government-owned companies is occurring increasingly in both the North and the South. However, the converse is true in the petrochemicals industry, where government involvement has increased. In the countries of Eastern Europe and the former Soviet Union, the rate of privatization has become extremely high; this movement in fact is likely to dominate economic change in those countries over the next several years. However, progress in the new market-oriented industries is slow, and in the case of the machine tool industry, some time will be required before modernization is completed;

(c) Trends towards consolidation have been evident among the more advanced industries, particularly in high technology, as companies gear up to global competition. Thus, merger and acquisition activity has been extensive in the semiconductor and the power-generating equipment industries. This extensive restructuring has been a response to substantial excess capacity, and adverse economic conditions have weakened demand. The restructuring of these industries worldwide has been carried out not only through the closure of obsolete plants, upgrading capacity, trimming the workforce, increased research and development expenditures and a shift in production toward higher value-added output, but also through mergers, take-over bids and acquisitions. The copper-processing industry, which is now experiencing greater sales and profits, provides a good example of the benefits gained by industries that engaged in such restructuring. Examples of other such industries include the semiconductor and petrochemicals industries;

(d) In international trade, the United States and Asia are of growing importance as export markets for other countries, the former because it can take advantage of production cost differentials in exporting developing countries, and the latter because demand has far outstripped the capacity of local supply. The countries of Eastern Europe and the former Soviet Union are likely to provide markets eventually for high-technology products such as higher value-added steels, advanced materials or semiconductors. Another important factor will be the impact on world markets of increasing unification of the EC countries;

(e) The rapid adoption of new technologies appears to be essential to the survival and expansion of many capital goods industries. For example, the modernization of the numerically controlled machine tool industry depends on new technologies such as automatic tool and process control operations, numerical control systems, machinery centres, turning machinery, automation and computers, and flexible cells. Technology has also been driving the power-generating equipment industry, where energy costs and environmental controls have fostered more energy-efficient and lower-polluting equipment. Furthermore, many mining and mineral-processing industries have developed or purchased subdivisions that produce advanced materials, which often serve as substitutes for traditional mineral-based products;

(f) Not surprisingly, many transnational corporations located in the United States, Japan and Western Europe are increasingly moving towards global market integration and concentration, particularly in technology, research-, and development-intensive industries, such as power-generating equipment, semiconductors and fine chemicals. However, the location of such industries in developed countries is likely to persist, because of their need for advanced technology and financial resources, and because of their proximity to their respective end-using industries;

(g) Environmental concerns are having a growing impact on the technology choice and the location of highly polluting industries. This has become paramount in the power-generating equipment industry, where users have to make a choice, for example, between natural gas or coal-fired boilers, nuclear power or hydropower. Investment also in other industries such as petrochemicals, industrial lift trucks, seafood processing, higher value-added steel, copper processing and market pulp for paper are being markedly affected by more stringent environmental regulations and consequent higher costs of pollution abatement. There is thus likely to be relocation of these and other industries to developing countries, where pollution controls are less stringent. In some cases, such as petrochemicals, the production of lower-technology chemicals would also be more suited to production in developing countries. In other cases, the market pulp industry is concerned as to whether Governments will influence increased use of waste paper;

(h) Finally, increased demand for manufactured output in developing countries has caused a renewed shift in manufacturing capacity to these countries. Some examples of the industries involved are cocoa processing, seafood processing and petrochemicals. In the case of advanced materials the shift has been slower, but some attraction also exists in the availability of raw material feedstocks. An increase in the demand for such manufactured products is also expected in Eastern Europe and the former Soviet Union.

Distr.
GENERAL

GC.5/21
17 September 1993

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

GENERAL CONFERENCE

Fifth session
Yaounde, 6-10 December 1993
Item 13 (a) of the provisional agenda

MATTERS RELATED TO INTERGOVERNMENTAL, NON-GOVERNMENTAL, GOVERNMENTAL AND OTHER ORGANIZATIONS

Note by the Director-General

Summary

Provides information on events related to agreements with intergovernmental organizations and to consultative status of non-governmental organizations associated with the work of UNIDO since the fourth session of the General Conference.

CONTENTS

	Paragraphs	Page
Introduction	1	1
Chapter		
I. ORGANIZATIONS IN THE UNITED NATIONS SYSTEM OTHER THAN THE UNITED NATIONS	2	1
II. INTERGOVERNMENTAL ORGANIZATIONS	3 - 4	1
III. NON-GOVERNMENTAL ORGANIZATIONS	5	1
Annexes		
I. Intergovernmental organizations with which relationship agreements have been or will be concluded		2
II. International non-governmental organizations having consultative status with UNIDO		3

Introduction

1. In accordance with Article 19 of the Constitution, the General Conference, at its first session, issued guidelines according to which the Director-General, with the approval of the Industrial Development Board, may enter into agreements or establish appropriate relations with certain organizations (decision GC.1/Dec.41, annex). Paragraphs 4, 11 and 19 of the guidelines stipulate that the Director-General shall report to the Conference at each regular session on any agreements with intergovernmental or governmental organizations or other organizations of the United Nations system entered into by him on behalf of the Organization and on any consultative relations established since the preceding regular session. The present document complies with those stipulations, and provides information on related events that have taken place since the fourth session of the General Conference.

I. ORGANIZATIONS IN THE UNITED NATIONS SYSTEM OTHER THAN THE UNITED NATIONS

2. In implementing the relationship agreement with the International Labour Organisation (ILO), a Working Arrangement was signed on 7 October 1991 that further defines the areas of cooperation between ILO and UNIDO.

II. INTERGOVERNMENTAL ORGANIZATIONS

3. At its ninth, tenth and eleventh sessions, the Board, in decisions IDB.9/Dec.18, IDB.10/Dec.20 and IDB.11/Dec.35, authorized the Director-General to conclude appropriate relationship agreements with a total of seven further intergovernmental organizations (IGOs), bringing the total number of IGOs with which the Director-General was authorized to negotiate such agreements to 46. A listing of the 46 IGOs is provided in annex I to the present document.

4. Since the fourth regular session of the General Conference, the Director-General has concluded appropriate relationship agreements with the following four IGOs:

African Intellectual Property Organization
Asian-African Legal Consultative Committee
European Community
International Pepper Community

This brings the number of IGOs with which the Director-General has concluded appropriate relationship agreements to 28 (see annex I) since UNIDO became a specialized agency.

III. NON-GOVERNMENTAL ORGANIZATIONS

5. At its tenth and eleventh sessions, the Board in decisions IDB.10/Dec.21 and IDB.11/Dec.36 decided to grant consultative status with UNIDO to seven non-governmental organizations (NGOs), bringing to a total of 100 the number of NGOs in consultative status with UNIDO. A listing of the 100 NGOs is provided in annex II.

V.93 68798 6083E

Annex I

INTERGOVERNMENTAL ORGANIZATIONS WITH WHICH RELATIONSHIP AGREEMENTS HAVE BEEN OR WILL BE CONCLUDED

(as of 17 September 1993 - 46 organizations)

Name of organization	Abbreviation/ acronym	Authority/ decision	Background information document
* African Development Bank	AfDB	IDB.2/Dec.28	IDB.2/31
* African Intellectual Property Organization	OAPI	IDB.6/Dec.19	IDB.6/15
African Postal and Telecommunication Union	APTU	IDB.4/Dec.44	IDB.4/6
* African Regional Centre for Technology	ARCT	IDB.2/Dec.28	IDB.2/31
* African Regional Organization for Standardization	ARSO	IDB.2/Dec.28	IDB.2/31
* Agency for Cultural and Technical Co-operation	ACCT	IDB.2/Dec.28	IDB.2/31
Andean Parliament		IDB.2/Dec.28	IDB.2/31
* Arab Industrial Development and Mining Organization	AIDMO	IDB.2/Dec.28	IDB.2/31
Arab League Educational, Cultural and Scientific Organization	ALECSO	IDB.2/Dec.28	IDB.2/31
* Arab Union for Cement and Building Materials	AUCBM	IDB.3/Dec.43	IDB.3/24
* Asian-African Legal Consultative Committee	AALCC	IDB.10/Dec.20	IDB.10/16/Add.1
* Asian and Pacific Coconut Community	APCC	IDB.2/Dec.28	IDB.2/31
Caribbean Community	CARICOM	IDB.5/Dec.40	IDB.5/22
* Caribbean Development Bank	CARIBANK	IDB.2/Dec.28	IDB.2/31
* Cartagena Agreement	Cartagena	IDB.2/Dec.28	IDB.2/31
* Central African Customs and Economic Union	UDEAC	IDB.2/Dec.28	IDB.2/31
* Central African States Development Bank	CASDB	IDB.2/Dec.28	IDB.2/31
Council for Arab Economic Unity	CAEU	IDB.2/Dec.28	IDB.2/31
Development Bank of the Great Lakes States	BDEGL	IDB.10/Dec.20	IDB.10/16
Economic Cooperation Organization	ECO	IDB.11/Dec.35	IDB.11/18
* European Community	EC	IDB.6/Dec.19	IDB.6/15
* Financial Fund for Development of the Plate River Basin	FONPLATA	IDB.8/Dec.39	IDB.8/44
* Fund for Solidarity and Economic Development of the West African Economic Community	FOSIDEC	IDB.6/Dec.19	IDB.6/15/Add.1
* Group of Latin American and Caribbean Sugar Exporting Countries	GEPLACEA	IDB.2/Dec.28	IDB.2/31
Cooperation Council for the Arab States of the Gulf	GCC	IDB.10/Dec.20	IDB.10/16
* Gulf Organization for Industrial Consulting	GOIC	IDB.2/Dec.28	IDB.2/31
* International Centre for Public Enterprises in Developing Countries	ICPE	IDB.2/Dec.28	IDB.2/31
* International Center for Scientific and Technical Information	ICSTI	IDB.5/Dec.40	IDB.5/22
International Institute for Cotton	IIC	IDB.2/Dec.28	IDB.2/31
International Jute Organization	IJO	IDB.4/Dec.44	IDB.4/6
* International Lead and Zinc Study Group	ILZSG	IDB.5/Dec.40	IDB.5/22
* International Organization for Migration a/	IOM	IDB.2/Dec.28	IDB.2/31
* International Pepper Community	IPC	IDB.8/Dec.39	IDB.8/44
International Tropic Timber Organization	ITTO	IDB.5/Dec.40	IDB.5/22
Islamic Center for the Development of Trade	ICDT	IDB.2/Dec.28	IDB.2/31
Islamic Development Bank	IDB	IDB.2/Dec.28	IDB.2/31
Islamic Educational, Scientific and Cultural Organization	ISESCO	IDB.11/Dec.35	IDB.11/18
Islamic Foundation for Science, Technology and Development	IFSTAD	IDB.8/Dec.39	IDB.8/44
Latin American Integration Association	ALADI	IDB.11/Dec.35	IDB.11/18
League of Arab States	LAS	IDB.9/Dec.18	IDB.9/19
* Organization for the Development of the Senegal River	OMVS	IDB.2/Dec.28	IDB.2/31
* Organization of African Unity	OAU	IDB.2/Dec.28	IDB.2/31
Organization of the Islamic Conference	OIC	IDB.2/Dec.28	IDB.2/31
* Preferential Trade Area for Eastern and Southern African States	PTA	IDB.4/Dec.44	IDB.4/6
* South Asia Co-operative Environment Programme	SACEP	IDB.2/Dec.28	IDB.2/31
* West African Development Bank	WADB	IDB.2/Dec.28	IDB.2/31

* Agreement concluded.

a/ Formerly named the Intergovernmental Committee for Migration.

Note: The Council for Mutual Economic Assistance ceased its activities on 26 September 1991.

Annex II

INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS
HAVING CONSULTATIVE STATUS WITH UNIDO

(as of 17 September 1993: 100 organizations)

Name of organization	Abbreviation/ acronym	Authority/ decision	Background information document
African Technical Association	ATA	IDB.2/Dec.29	IDB.2/5
Afro-Asian Peoples' Solidarity Organizations	AAPSO	IDB.2/Dec.29	IDB.2/5
Agri-Energy Roundtable, Inc.	AER	IDB.2/Dec.29	IDB.2/5/Add.1
Arab Federation for Food Industries	AFFI	IDB.2/Dec.29	IDB.2/5
Arab Federation of Chemical Fertilizers Producers	AFCFP	IDB.2/Dec.29	IDB.2/5
Arab Iron and Steel Union	AISU	IDB.2/Dec.29	IDB.2/5
Arab Sugar Federation	ASF	IDB.2/Dec.29	IDB.2/5/Add.1
Association of African Development Finance Institutions	AADFI	IDB.2/Dec.29	IDB.2/5/Add.1
Association of Latin American Industrialists	AILA	IDB.2/Dec.29	IDB.2/5
Austro-Egyptian Chamber of Commerce		IDB.4/Dec.45	IDB.4/17
Club of Dakar		IDB.2/Dec.29	IDB.2/5
Collaborative International Pesticides Analytical Council Limited	CIPAC	IDB.4/Dec.45	IDB.4/17
European Federation of Management Consultants' Associations	FEACO	IDB.2/Dec.29	IDB.2/5
European Federation of National Engineering Associations	FEANI	IDB.2/Dec.29	IDB.2/5
European Federation of National Maintenance Societies	EFNMS	IDB.2/Dec.29	IDB.2/5/Add.1
European Fertilizer Manufacturers' Association	EFMA	IDB.5/Dec.41	IDB.5/23
European Organization for Quality a/	EOQ	IDB.2/Dec.29	IDB.2/5/Add.1
Federation of African Consultants	FECA	IDB.2/Dec.29	IDB.2/5/Add.1
Institute for the Development of International Co-operation	IDCI	IDB.2/Dec.29	IDB.2/5
Institute of Higher Management	ISG	IDB.8/Dec.40	IDB.8/14
International Academy of Architecture	IAA	IDB.8/Dec.40	IDB.8/14
International Academy of Engineering	IAE	IDB.11/Dec.36	IDB.11/16
International Academy of Technological Sciences		IDB.10/Dec.21	IDB.10/13
International Alliance of Women	IAW	IDB.8/Dec.40	IDB.8/14
International Association for Cereal Science and Technology	ICC	IDB.2/Dec.29	IDB.2/5
International Association for Hydraulic Research	IAHR	IDB.6/Dec.20	IDB.6/4
International Association for the Exchange of Students for Technical Experience	IAESTE	IDB.2/Dec.29	IDB.2/5/Add.1
International Association for the Protection of Industrial Property	AIPPI	IDB.2/Dec.29	IDB.2/5/Add.1
International Association of Crafts and Small- and Medium-sized Enterprises	IACME	IDB.2/Dec.29	IDB.2/5
International Association of Islamic Banks	IAIB	IDB.2/Dec.29	IDB.2/5
International Association of Trading Organizations for a Developing World b/	ASTRO	IDB.4/Dec.45	IDB.4/17
International Centre for Earth Construction	CRATerre	IDB.6/Dec.20	IDB.6/4
International Centre for the Training of Bank Professionals	CIFPB	IDB.6/Dec.20	IDB.6/4
International Chamber of Commerce	ICC	IDB.2/Dec.29	IDB.2/5
International Committee for Plastics in Agriculture	CIPA	IDB.2/Dec.29	IDB.2/5
International Confederation of Free Trade Unions	ICFTU	IDB.2/Dec.29	IDB.2/5
International Co-operative Alliance	ICA	IDB.2/Dec.29	IDB.2/5
International Council for Building Research, Studies and Documentation	CIB	IDB.2/Dec.29	IDB.2/5
International Council of Graphic Design Associations	ICOGRADA	IDB.8/Dec.40	IDB.8/14
International Council of Societies of Industrial Design	ICSID	IDB.2/Dec.29	IDB.2/5
International Council of Women	ICW	IDB.2/Dec.29	IDB.2/5
International Electrotechnical Commission	IEC	IDB.2/Dec.29	IDB.2/5
International Federation for Heat Treatment and Surface Engineering	IFHT	IDB.8/Dec.40	IDB.8/14
International Federation for Medical and Biological Engineering	IFMBE	IDB.2/Dec.29	IDB.2/5
International Federation of Agricultural Producers	IFAP	IDB.2/Dec.29	IDB.2/5
International Federation of Automatic Control	IFAC	IDB.2/Dec.29	IDB.2/5/Add.1
International Federation of Business and Professional Women	IFBPW	IDB.4/Dec.45	IDB.4/17
International Federation of Consulting Engineers	FIDIC	IDB.2/Dec.29	IDB.2/5/Add.1
International Federation of Pharmaceutical Manufacturers Associations	IFPMA	IDB.2/Dec.29	IDB.2/5

Annex II (continued)

Name of organization	Abbreviation/ acronym	Authority/ decision	Background information document
International Fertilizer Industry Association	IFA	IDB.2/Dec.29	IDB.2/5
International Foundation for the Promotion of Privatization and Foreign Investments	FPI	IDB.11/Dec.36	IDB.11/16
International Institute of Welding	IIW	IDB.2/Dec.29	IDB.2/5/Add.1
International Measurement Confederation	IMECO	IDB.2/Dec.29	IDB.2/5
International Organization for Standardization	ISO	IDB.2/Dec.29	IDB.2/5
International Organization of Consumers Unions	IOCU	IDB.2/Dec.29	IDB.2/5
International Organization of Employers	IOE	IDB.2/Dec.29	IDB.2/5
International Organization of Experts	ORDINEX	IDB.2/Dec.29	IDB.2/5/Add.1
International Savings Bank Institute	ISBI	IDB.2/Dec.29	IDB.2/5/Add.1
International Society for Engineering Education	IGIP	IDB.2/Dec.29	IDB.2/5
International Statistical Institute	ISI	IDB.10/Dec.21	IDB.10/13
International Union for Co-operation towards Development	UNICOS	IDB.8/Dec.40	IDB.8/14
International Union of Architects	UIA	IDB.2/Dec.29	IDB.2/5
International Union of Food Science and Technology	IUFoST	IDB.2/Dec.29	IDB.2/5/Add.1
International Union of Leather Technologists and Chemists Societies	IULTCS	IDB.2/Dec.29	IDB.2/5
International Union of Testing and Research Laboratories for Materials and Structures	RILEM	IDB.2/Dec.29	IDB.2/5/Add.1
Islamic Chamber of Commerce, Industry and Commodity Exchange	ICCICE	IDB.2/Dec.29	IDB.2/5
Latin American Association of Development Financing Institutions	ALIDE	IDB.2/Dec.29	IDB.2/5
Latin American Association of Food Processors	ALICA	IDB.2/Dec.29	IDB.2/5
Latin American Association of Pharmaceutical Industries	ALIFAR	IDB.2/Dec.29	IDB.2/5
Latin American Iron and Steel Institute	ILAFA	IDB.2/Dec.29	IDB.2/5
Latin American Plastics Institute	ILAP	IDB.2/Dec.29	IDB.2/5/Add.1
Licensing Executives Society	LES	IDB.2/Dec.29	IDB.2/5/Add.1
Moscow International Energy Club	MIEC	IDB.6/Dec.20	IDB.6/4
Mutual Assistance of the Latin American Government Oil Companies	ARPEL	IDB.2/Dec.29	IDB.2/5
Organization of Islamic Capitals and Cities	OICC	IDB.11/Dec.36	IDB.11/16
Pan African Union of Science and Technology	PUST	IDB.10/Dec.21	IDB.10/13
Pan American Standards Commission	COPANT	IDB.2/Dec.29	IDB.2/5
"Pio Manzu" International Research Centre		IDB.2/Dec.29	IDB.2/5
Professors' Association of Metrologists	PAM	IDB.10/Dec.21	IDB.10/13
Society for International Development	SID	IDB.2/Dec.29	IDB.2/5
Society of Chemical Industry	SCI	IDB.2/Dec.29	IDB.2/5
Third World Foundation for Social and Economic Studies		IDB.2/Dec.29	IDB.2/5
Transfrigoroute International	TI	IDB.5/Dec.41	IDB.5/23
Union of Industrial and Employers' Confederations of Europe c/	UNICE	IDB.2/Dec.29	IDB.2/5
Union of International Fairs	UFI	IDB.2/Dec.29	IDB.2/5
Union of International Technical Associations	UITA	IDB.2/Dec.29	IDB.2/5
Union of Producers, Conveyors and Distributors of Electric Power in Africa	UPDEA	IDB.2/Dec.29	IDB.2/5
Women's International Democratic Federation	WIDF	IDB.4/Dec.45	IDB.4/17
World Assembly of Small and Medium Enterprises	WASME	IDB.2/Dec.29	IDB.2/5
World Association for Element-building and Prefabrication	WAEP	IDB.2/Dec.29	IDB.2/5/Add.1
World Association of Industrial and Technological Research Organizations	WAITRO	IDB.2/Dec.29	IDB.2/5
World Coal Institute	WCI	IDB.8/Dec.40	IDB.8/14
World Confederation of Labour	WCL	IDB.2/Dec.29	IDB.2/5
World Council of Management	CIOS	IDB.5/Dec.41	IDB.5/23
World Export Processing Zones Association	WEPZA	IDB.2/Dec.29	IDB.2/5
World Federation of Development Financing Institutions	WFDFI	IDB.2/Dec.29	IDB.2/5
World Federation of Engineering Organizations	WFEO	IDB.2/Dec.29	IDB.2/5
World Federation of Trade Unions	WFTU	IDB.2/Dec.29	IDB.2/5
World Organization of Building Officials	WOBO	IDB.5/Dec.41	IDB.5/23
World Packaging Organization	WPO	IDB.8/Dec.40	IDB.8/14

a/ Formerly named the European Organization for Quality Control.

b/ Formerly named the International Association of State Trading Organizations in Developing Countries.

c/ Formerly named the Union of Industries of the European Community.

Distr.
GENERAL

GC.5/22
28 September 1993

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

GENERAL CONFERENCE

Fifth session
Yaoundé, 6-10 December 1993
Item 13 (c)(i) of the provisional agenda

PERSONNEL MATTERS: UNITED NATIONS JOINT STAFF PENSION FUND

Issues related to the pension system

Report by the Director-General

I. REPRESENTATION OF THE UNIDO GOVERNING BODY ON THE UNIDO STAFF PENSION COMMITTEE

1. The UNIDO Staff Pension Committee, established by the General Conference (GC.1/Dec.37), held six meetings in 1992 and two meetings in the period January through August 1993.

2. The following representatives of the General Conference who, by decisions GC.4/Dec.23, IDB.10/Dec.18 and IDB.11/Dec.32 were elected for the biennium 1992-1993, presently hold office for a term ending 31 December 1993:

Members:	Mr. A. Q. Al-Eryani (Yemen)
	Mr. E. Zádor (Hungary)
Alternate members:	Mr. A. Aziria (Algeria)
	Mr. J.S. Kramer (Netherlands)

3. The General Conference at its fifth session will be called upon to elect two members and two alternate members as its representatives for the following two-year term of office ending 31 December 1995. The recommendations of the Board in that respect are contained in its decision IDB.11/Dec.32 (see para. 7 (b) below).

II. COMPREHENSIVE REVIEW OF THE PENSIONABLE REMUNERATION OF STAFF IN THE GENERAL SERVICE AND RELATED CATEGORIES

4. As reported to the Board in document IDB.10/28, the General Assembly in 1990 requested the International Civil Service Commission (ICSC), in full cooperation with the United Nations Joint Staff Pension Board (UNJSPB), to undertake a comprehensive review of the pensionable remuneration and consequent pensions of staff in the General Service and related categories. Having considered the respective annual reports of UNJSPB and ICSC, the General Assembly in its resolution 47/203, section III, requested the Commission, in close cooperation with UNJSPB, to finalize the comprehensive review in 1993 and to submit recommendations on all aspects of the methodology, including the effective date of implementation and transitional measures to protect acquired rights, to the General Assembly at its forty-eighth session. After considering the views of the Pension Board on the conclusions reached by the Commission at its March 1993 session, the Commission decided to recommend to the General Assembly that: 1/

(a) The income replacement approach using 66.25 per cent as the grossing-up factor of the net pensionable salary should be used to determine the pensionable remuneration for General Service staff. The revised procedure should be implemented on the occasion of the first adjustment of the salary scale on or after 1 April 1994, subject to the transitional measures applied on the occasion of the introduction of the 1992 staff assessment scale;

(b) Subsequent adjustments of pensionable remuneration, until the introduction of the common staff assessment scale, should be made on the basis of a 1-to-1 interim adjustment procedure; 2/

(c) As part of the comprehensive review in 1996 of the methodology to determine the pensionable remuneration and consequent pensions of staff in the Professional and higher categories, a procedure outlined by the Commission should be used to determine a common staff assessment scale with two separate sets of rates (single and dependent). The common staff assessment scale should be introduced in 1997 to determine the pensionable remuneration of the two categories of staff; in 1996 the Commission would recommend the modalities for the implementation of the common staff assessment scale including appropriate transitional measures, if needed.

1/ The following subparagraphs are an excerpt from document ICSC/38/CRP.4/Add.3, para. 56, the full text of which is available upon request.

2/ The 1-to-1 interim adjustment procedure would be a mechanism by which pensionable remuneration should be increased on the same date and by the same percentage as net salary, thus aligning the interim adjustment procedure for the pensionable remuneration of the General Service staff with that used for the Professional staff.

V.93-88853 6163E

Distr.: 4 October 1993

5. Pending further review of the issue of the non-pensionable component, the Commission decided to maintain the provisions currently applied at certain field duty stations.

6. The Pension Board recommended an amendment to the regulations of the United Nations Joint Staff Pension Fund to reflect the change in methodology, if so approved by the General Assembly. The revised methodology might also require an amendment to the UNIDO Staff Rules defining pensionable remuneration for which purpose the Pension Board has recommended a prototype text for the use of its member organizations. In accordance with Article XIII of the Staff Regulations, any such amendment would be reported by the Director-General to the Board and subsequently to the General Conference.

III. ACTION REQUIRED OF THE CONFERENCE

7. The Conference may wish to consider the adoption of the following draft decision:

"The General Conference:

"(a) Takes note of the information contained in the report by the Director-General on issues related to the pension system (GC.5/22), including the recommendations of the International Civil Service Commission to the General Assembly at its forty-eighth session;

"(b) Upon the recommendation of the Industrial Development Board contained in decision IDB.11/Dec.32, decides to elect the following two members and two alternate members of the UNIDO Staff Pension Committee for the biennium 1994-1995:

Members: Mr. A. Aziria (Algeria)
Mr. J. Kramer (Netherlands)

Alternate members: Mr. J. Garcia Torres (Peru)
Mr. S. Szivós (Hungary)

"(c) Authorizes the Industrial Development Board to proceed with the election for any of the above-mentioned posts which might become vacant before the General Conference holds its sixth session."